



Curriculum Vitae

Personal data

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Place and date of birth:	Valencia (Spain). April 16, 1976 (48 years)
ID number:	22 573 014-D
Research ID:	I-4830-2012
ORCID ID:	0000-0002-8585-9345
Marital status:	Married
Last update:	January 12, 2026

Education

- 2004. Ph. D. at the University of Valencia (Spain). With distinction.
Title: “*Aspects of universal extra dimensional models and their latticized extensions*”
Supervisors: Prof. A. Santamaria & Dr. J. Papavassiliou
Extra qualification: “**European Ph. D.**” <http://hdl.handle.net/10550/14914>
- 2001. Master thesis: “*Neutrinos in the Zee model and its extensions*”. Max marks.
- 2001. Obtained the “Advanced Studies Diploma”. Maximum marks.
- 1999. Graduate in Physics by the University of Valencia.
Awarded by the University of Valencia with the “**Extraordinary prize to the best records in Physics**”.

Current professional status

Position:	Investigador Científico / Research Scientist
Agency:	Consejo Superior de Investigaciones Científicas, CSIC
Center:	Institute of Instrumentation for Molecular Imaging, i3M
Starting:	Jun 10, 2024
Research triennia:	4

Participation in research projects

EUROPEAN PROJECTS

- 2016-2020. **“European Nuclear Science and Application Research 2(EN-SAR 2)”**. (H2020-INFRAIA-2014-2015). GANIL(France), INFN (Italy), CERN(Switzerland), CNRS(France), GSI(Germany), RUG(Netherlands), IFJ PAN(Poland), UNIWARS AW (Poland), IFIN-HH (Romania), FBK(Italy), EBG MEDAustron (Austria), KU Leven (Belgium), ULB(Belgium), CEA(France), GIP ARRONAX(France), JLU(Germany), JGU Mainz(Germany), LMU(Germany), UCO(Germany), NCSR D (Greece), UMIL(Italy), FFCUL(Portugal), CIEMAT(Spain), CSIC (Spain), USC(Spain), USE(Spain), ULIV(United Kingdom), UoY(United Kingdom), ATOMKI-HAS (Hungary),
Main researcher: Prof. P. Thirolf. Budget: 10.000.000 Eur
- 2010-2013. **“European NoVel Imaging Systems for ION therapy (ENVISION)”**. (FP7-HEALTH-F4-2010-241851). CERN (Switzerland), TU Dresden (Germany), Medizinische Universitaet Wien (Austria), Universite Claude Bernard Lyon 1 (France), Oxford University (U.K.), Siemens AG (Germany), Ion Beam Applications SA (Belgium), INFN (Italy), Fondazione per adroterapia oncologica (Italy), Universitaetsklinikum Heidelberg (Germany), GSI (Germany), Maastricht (Netherlands), CNRS (France), CSIC (Spain), Universiteit Gent, Politecnico di Milano (Italy), Universidad de Castilla - La Mancha (Spain).
Main researcher: Prof. Manjit Dosanjh, CERN. Budget: 5.996.460 Eur
- 2008-2010. **“Minimizing activity and dose with enhanced image quality by radiopharmaceutical administrations (MADEIRA)”**. (FP7-HEALTH-F4-2008-212100) Comisión Europea EUROATOM (FP7 Fission). Helmholtz-Institut München GSF (Germany), Univ. Lund (Sweden), Josef Stefan Institute (Slovenia), IFIC (CSIC/Univ. Valencia), SCIVIS (Germany), Univ. Milano (Italy), Univ. Michigan (EE.UU.)
Main researcher: Prof. Cristoph Hoersch, Helmholtz-Institut München.
Budget: 2.820.000 Eur

NATIONAL PROJECTS

- 2018-2019. **“Investigación de Técnicas Compton para Aplicaciones Médicas”**, (FPA2017-85611-R). Ministry of Science, Innovation and Universities / Plan Nacional de I+D+i
Main Researchers: Prof. J. Bernabeu and Ph. D. G. Llosá
Partners: Universidad de Valencia

- Budget: — Eur.
Jan 1, 2018 - Dec 31, 2019
- 2016. **“Diagnóstico y seguimiento del pie diabético mediante termografía infrarroja”**, (10_TERMOPIE_CIBRIAN_BLASCO_2016-A). Prog. VLC-BIOCLINIC. Hospital Clínico de Valencia
Main Researcher: Ph. D. R. Cibrian and C. Blasco
Partners: Universidad de Valencia / Hospital Clínico
Budget: 4.000 Eur.
Nov 11, 2016 - Nov 11, 2017
 - 2015-2017. **“Detectores para aplicaciones médicas”**, (FPA2014-53599-R). Ministry of Science and Innovation / Plan Nacional de I+D+i
Main Researcher: Ph. D. G. Llosá
Partners: Universidad de Valencia / RWTH Aachen (Alemania)
Budget: 176.781 Eur.
Jan 1, 2015 - Jul 31, 2017
 - 2015. **“Alineamiento Temporal de sonda y escáneres comerciales”**, (18_ETIME_LLOSA_BEL). Prog. VLC-BIOMED. HUIP La Fe-Universitat de Valencia
Main Researcher: Ph. D. G. Llosá and P. Bello
Partners: Universidad de Valencia / La Fe Hospital
Budget: 4.000 Eur.
Jan 1, 2015 - Dec 31, 2015
 - 2012-2015. **“Ayudas a grupos de investigación para la constitución y acreditación de las redes de excelencia”**, (ISIC/2012/020). Generalitat Valenciana.
Main Researcher: J. Bernabeu.
Budget: 116.100 Eur.
Jan 1, 2012 - Dec 31, 2015
 - 2011-2013. **“Image Quality and Quantification in Positron Emission Tomography”**, (FPA2010-14891). Ministry of Science and Innovation / Plan Nacional de I+D+i
Main Researcher: Ph. D. Rafecas López, Magdalena. Members: 8.
Partners: Universidad de Valencia / RWTH Aachen (Alemania)
Budget: 176.781 Eur.
Jan 1, 2011 - Jul 31, 2014
 - 2010. **“GRID and e-Science: Analysis of data coming from the ATLAS detector and Medical Physics”**, (PCI A/030322/10). Given by Ministry of External Affairs and Cooperations. IFIC and U. Mohamed V-Agdal (Morocco).
Main researcher: Dr. Santiago Gonzalez de la Hoz
Budget: 8.000 Eur
Dec 13, 2011 - Dec 6, 2013
 - 2009-2010. **“AX-PET: A new concept of scanner for Positron Emission Tomography with WLS strips and G-APDs.”**, (FPA2008-02419-E/FPA). Ministry of Science and Innovation.
Main researcher: Ph. D. Rafecas López, Magdalena.
 - 2008-2009. **“Estudios de diseño y viabilidad sobre imagen y aceleradores”**, ICTS-2008-06. Ministry of Science and Innovation.

- Main researcher: Prof. José Bernabeu Alberola, IFIC.
Budget: 376.250 Eur
- 2009-2010. **“Estudios de diseño y viabilidad sobre imagen y aceleradores”**, ICTS-2009-19. Ministry of Science and Innovation.
Main researcher: Prof. José Bernabeu Alberola, IFIC.
Budget: 49.000 Eur
 - 2011-2012. **“Estudios sobre imagen y aceleradores aplicados a la medicina”**, FPA2010-11465-E. Ministry of Science and Innovation.
Main researcher: Prof. José Bernabeu Alberola, IFIC.
Budget: 90.000 Eur
 - 2008-2009. **“Positron emission tomography for small animals: Random coincidences and intercrystal Compton scattering”**, (PCI2006-A7-0602). Ministry of Education and Science.
Main researcher: Ph. D. Rafecas López, Magdalena.
 - 2007-2010. **“Improving Image Quality in Positron Emission Tomography”**, (TEC2007-61047). Ministry of Education and Science.
Main researcher: Ph. D. Rafecas López, Magdalena.
 - 2007-2008. **“Integrated action with Italy”**, (HI2006-0082). Ministry of Education and Science.
Main researcher: Ph. D. Rafecas López, Magdalena.
 - 2006-2007. **“Medical image in positron emission tomography”**, (GV06/246). Valencian Counsel of Industry, University and Science.
Main researcher: Ph. D. Rafecas López, Magdalena.
 - 2002-2006. **“Participación en la Construcción del Detector de Trazas de Silicio de ATLAS”**, (FPA2003-03878-C02-01). Ministry of Education and Science.
Main researchers: Prof. Carmen García García.
 - 2002-2006. **“Fundamental Interactions”**.
IISN and Belgium science policy (IAP v/27).
Main researchers: Prof. Jean M. Frère and Prof. Margenau.
 - 2003-2004. **“Effective theories: basics and phenomenological applications”**.
DGESIC PB97-1261.
Main researcher: Prof. A. Pich.
 - 2003-2004. **“Particle phenomenology: Colour and flavour physics, dynamics and experimental determination of its parameters”**.
MCyT FPA2001-3031.
Main researcher: Prof. A. Pich.
 - 2002-2003. **“Physics of elementary particles: current theories and their possible extensions”**.
Generalitat Valenciana GV01-94.
Main researcher: Prof A. Santamaria Luna.
Budget: 9.000 Eur
 - 2002-2003. **“Perturbative and non perturbative studies of the standard model and its extension”**.

Ministry of Science and Technology, BFM2002-00568.

Main researcher: Prof. A. Santamaria Luna.

Budget: 50.160 Eur.

PRIVATE SECTOR PROJECTS

- 2020-2022. **“Artificially-assisted attenuation correction for PET”**.

Bruker corp.

Main Researchers: Prof. Craig Levin, Ph.D. J.F. Oliver and J. Fisher

Partners: University of Stanford and Bruker corp.

Budget: — Eur.

Jan 1, 2020 - Dec 31, 2022

Scientific coordination

- 2020-2022. **“Artificially-assisted attenuation correction for PET”**.

Scientific coordinator. Collaboration between the University of Stanford (Dept. Radiology / Molecular Imaging Program) and Bruker Corp. (R&D Preclinical division of Nuclear Molecular Image).

- 2019-2023. **“General research lines associated with Image Reconstruction”**.

Scientific coordinator. Inner contact inside the Bruker PET group to coordinate any image reconstruction scientific research-related interactions with universities or research centers.

- 2013-2019. **“Scientific coordinator of the Image Reconstruction in the IRIS group at IFIC ”**.

Coordination of all the developments associated to the Image Reconstruction research lines within the group Image Reconstruction, Instrumentation and Simulations for medical imaging applications (IRIS) at Instituto de Física Corpuscular (IFIC).

- 2015-2019. **“Scientific equipment management”** associated to FEDER funds within the IFIMED facility.

Coordinator of all the research lines that were going to be executed by using the micro PET-CT laboratory at Servei Central de Suport a la Investigació Científica, SCSIE, at the University of Valencia, UV.

- 2011-2013. **“Image Quality and Quantification in Positron Emission Tomography”**, (FPA2010-14891). Ministry of Science and Innovation / Plan Nacional de I+D+i

Main Researcher: Ph. D. Rafecas López, Magdalena. Members: 8.

Partners: Universidad de Valencia / RWTH Aachen (Alemania)

Budget: 146.100 Eur.

Research Experience

- 2024- **Research Scientist (CSIC)** at Institute of Instrumentation for Molecular Imaging (i3M).
Period: Jun 10, 2024 →
- 2019-2024 **Senior NMI Image Reconstruction Expert** at Bruker corp. Division of preclinical imaging R&D
Period: Feb 1, 2019 → Jun 10, 2024
- 2015-2019 **Superior Research Technician** at Central Service of Support to Experimental Research at the University of Valencia
Period: Dec 1, 2015 → Jan 31, 2019
- 2015 **UV post-doctoral contract IVICFA** at IFIC (CSIC - University of Valencia)
Period: Jun 10, 2015 → Nov 30, 2015
- 2015 **UV post-doctoral contract CPAN** at IFIC (CSIC - University of Valencia)
Period: Jan 9, 2015 → Jun 9, 2015
- 2014-2015 **UV post-doctoral contract “IVICFA”** at IFIC (CSIC - University of Valencia)
Period: Aug 1, 2014 → Jan 8, 2015.
- 2012-2014 **CSIC post-doctoral contract** at IFIC (CSIC - University of Valencia)
Period: Jul 1, 2012 → Jul 31, 2014.
- 2009-2012 **CSIC “JAE Doctors” contract** at IFIC (CSIC - University of Valencia)
Period: Jul 1, 2009 → Jun 30, 2012.
- 2007-2009. **CSIC Post-doctoral contract** at IFIC (CSIC - University of Valencia)
Period: Jul 1, 2007 → Jun 30, 2009.
- 2007. **Post-doctoral contract** at IFIC (CSIC - University of Valencia)
Period: Mar 2, 2007 → Jun 30, 2007.
- 2004-2006. **Post-doctoral fellowship** at the Université Libre de Bruxelles (**ULB**).
Period: Oct 1, 2004 → Sep 30, 2006.
- 2004. **Post-doctoral fellowship** at the University of Valencia.
Period: Feb 1, 2004 → Nov 30, 2004.
- 2000. **Predocctoral fellowship, FPU-CSIC**, Training of university personnel given by the Ministry of Education and Culture and CSIC, **MEC-CSIC**.
Period: Jan 1, 2000 → Dec 31, 2003.
- 1999. **Collaboration fellowship** given by the Ministry of Education and Culture, **MEC**, to develop tasks related with the department of theoretical physics.

Seminars

- 2004. “**Models with one universal extra dimension**”.
Given at Université Libre de Bruxelles (ULB). Brussels (Belgium).

- 2004. **“Can power corrections be reliably computed in models with extra dimensions?.”**.
Given at Department of Theoretical Physics. Valencia (Spain).
- 2003. **“Can power corrections be reliably computed in models with extra dimensions?.”**.
Given at Technische Universität München (TUM). Germany.
- 2003. **“Models with one universal extra dimension”**.
Given at Institute for Particle Physics Phenomenology (IPPP). Durham (UK).
- 2001. **“Neutrinos in the Zee model and its extensions”**.
Given at Department of Theoretical Physics. Valencia (Spain).

- 2007. **“Modelling Coincidence Sorting Strategies for singles list-mode data in small animal PET”**
Given at Xth EFOMP Congress . Pisa (Italy).
- 2008. **“Estimation of random coincidences: revisiting the singles rate method for high resolution PET”**. Given at the University of Sherbrooke (Canada).
- 2009. **“Image Science Tutorial: Image Reconstruction”**. Given in the “PARTNER-IFIC Training Course: ”Detectors and Accelerators applied in Medicine”, held in Valencia, 12-17 June 2009.

Congress contributions

- 2022 **“IEEE Medical Imaging Conference”**. 5-12 Nov, 2022
“Emission-based attenuation correction for small animal PET-MR using conditional generative adversarial networks”.
J. Fisher, J. F. Oliver and Craig Levin
Poster presentation ¹.

————— 2021 —————

- 2021 **“IEEE Medical Imaging Conference”**. Oct 16 - Oct 23, 2021
“Image quality enhancements in high energy gamma-ray imaging with a Compton Camera”.
J. Roser, L. Barrientos, J. Bernabéu, M. Borja-Lloret, F. Hueso-González, E. Muñoz, J. F. Oliver, A. Ros, C. Senra, R. Viegas, G. Llosá
Poster presentation ¹

————— 2020 —————

¹First author different than J.F.O.

- 2020 “**IEEE Nuclear Science Symposium and Medical Imaging Conference (IEEE NSS MIC)**”, held in (virtual) Boston (USA). 31 Oct - 7 Nov, 2020.

“*Compton spectral joint image reconstruction of in-beam data combining two and three interaction events.*”.

J. Roser, L. Barrientos, J. Bernabéu, M. Borja-Lloret, E. Muñoz, J. F. Oliver, A. Ros, R. Viegas and G. Llosá

Poster presentation¹

- 2020 “**Talk at III Jornadas RSEF / IFIMED de Física Médica**, held in (virtual) Valencia (Spain). 14 - 15 Dec, 2020.

“*Improving the quality of the images obtained by the MACACO Compton telescope by means of a joint reconstruction algorithm*”.

J. Roser, L. Barrientos, J. Bernabéu, M. Borja-Lloret, E. Muñoz, J. F. Oliver, A. Ros, R. Viegas and G. Llosá

Oral presentation¹

————— 2019 —————

- 2019 “**Young Investigator’s Workshop on Photon Detection in Medicine and Medical Physics**”, held in Siegen (Germany). 2 - 3 Dic, 2019

“*Full characterization of MACACO II Compton telescope for hadron therapy treatment monitoring.*”.

L. Barrientos, J. Barrio, M. Borja-Lloret, C. Lacasta, E. Muñoz, J.F. Oliver, A. Ros, J. Roser, C. Senra, C. Solaz, R. Viegas and G. Llosá.

Poster presentation¹

- 2019 “**IEEE Medical Imaging Conference**”, held in Manchester (USA). Oct 26 - Nov 2, 2019

“*Laboratory and test-beam results with MACACO II*”.

Dr. Ana Ros Garcia, Luis Barrientos, Dr. John Barrio, Prof. José Bernabéu, Marina Borja-Lloret, Peter Dendooven, Francisco Javier García López, Maria Carmen Jimenez-Ramos, Dr. Carlos Lacasta, Ricardo Marco, Enrique Muñoz, Dr. Josep F. Oliver, Ikechi Ozoemelan, Jorge Roser, Carles Solaz, Rita Viegas, Dr. Gabriela Llosa

Poster presentation¹

- 2019 “**IEEE Medical Imaging Conference**”, held in Manchester (USA). Oct 26 - Nov 2, 2019

“*Three-interaction analytical model for a Compton Camera: performance with experimental data*”.

J. Roser, E. Muñoz, L. Barrientos, J. Bernabéu, M. Borja-Lloret, C. Lacasta, G. Llosá, R. Marco, A. Ros, C. Solaz, R. Viegas and J. F. Oliver.

Poster presentation¹

- 2019 “**XI CPAN days**”, held in Oviedo (Spain). 21-23 Oct, 2019

“*MACACO II results and further upgrades.*”.

G. Llosá, L. Barrientos, M. Borja-Lloret, A. Esteban, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, A. Ros, J. Roser, C. Solaz, R. Viegas.

J. F. Oliver.

Oral presentation¹

- 2019 “**ENSAR-MediNet Network final meeting. MEDAUSTRON**”, held in Viena (Austria). 7-9 Oct, 2019
“MACACO II developments and results.”.

G. Llosá, L. Barrientos, M. Borja-Lloret, A. Esteban, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, A. Ros, J. Roser, C. Solaz, R. Viegas.

J. F. Oliver.

Poster presentation¹

- 2019 “**ENSAR-MediNet Network final meeting. MEDAUSTRON**”, held in Viena (Austria). 7-9 Oct, 2019
“Initial evaluation of PETsys TOFPET2 ASIC for a scintillator based Compton Camera.”.

R. Viegas, L. Barrientos, J. Bernabéu, T. Binder, M. Borja-Lloret, J.V. Casaña, E. Muñoz, J. F. Oliver, A. Ros, J. Roser, C. Senra and G. Llosá

J. F. Oliver.

Poster presentation¹

- 2019 “**24th International Conference on Medical Physics**”, held in Santiago de Chile (Chile). 8-11 Sep, 2019

“Results with MACACO II: A Compton telescope for hadron therapy monitoring.”.
 L. Barrientos, M. Borja-Lloret, P. Dendooven, J. García López, M.C. Jimenez-Ramos, C. Lacasta, E. Muñoz, J. F. Oliver, I. Ozoemelum, A. Ros, J. Roser, C. Senra, C. Solaz, R. Viegas and G. Llosá.

J. F. Oliver.

Poster presentation¹

- 2019 “**XXXVII Reunión Bienal de la Real Sociedad Española de Física**”, held in Zaragoza (Spain). 15-19 Jul, 2019
“Evaluación Experimental del Telescopio Compton MACACO II.”.

L. Barrientos, J. Barrio, M. Borja-Lloret, A. Esteban, C. Lacasta, R. Marco, E. Muñoz, J.F. Oliver, A. Ros, J. Roser, C. Senra, C. Solaz, R. Viegas and Gabriela Llosá.

J. F. Oliver.

Oral presentation¹

- 2019 “**XXXVII Reunión Bienal de la Real Sociedad Española de Física**”, held in Zaragoza (Spain). 15-19 Jul, 2019
“Beam tests and upgrades of MACACO II Compton telescope.”.

Gabriela Llosá, L. Barrientos, J. Barrio, M. Borja-Lloret, A. Esteban, C. Lacasta, R. Marco, E. Muñoz, J.F. Oliver, A. Ros, J. Roser, C. Solaz, R. Viegas and Gabriela Llosá.

J. F. Oliver.

Oral presentation¹

- 2019 “**ENLIGHT Annual Meeting and Training**”, held in Caen (Francia). 1-3 Jul, 2019

“Experimental results with a Compton telescope prototype: MACACO II.”.

M. Borja-Lloret, L. Barrientos, J. Barrio, J. Bernabéu, P. Dendooven, F.J. García López, M.C Jiménez-Ramos, C. Lacasta, E. Muñoz, J. F. Oliver, I. Ozoemelum, A. Ros, J. Roser, C. Senra, C. Solaz and G. Llosá.

J. F. Oliver.

Oral presentation¹

- 2019 “**6th Intenational Conference on Advancements in Nuclear Instrumentation Measurements and their Applications, ANIMMA**”, held in Portoroz (Slovenia). 17-21 Jun, 2019

“Performance characterisation of MACACO II, a second prototype of a Compton telescope.”.

A. Ros, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, P. Dendooven, A. Etxebeste, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, I. Ozoemelum, J. Roser, C. Senra, C. Solaz and G. Llosá.

Oral presentation¹

- 2019 “**VI Mediterranean Thematic Workshop in Advanced Molecular Imaging: IMAGING IN IMMUNOTHERAPY**”, held in Valencia (Spain). May 15-17, 2019

“Upgrade of a Compton Telescope for hadron therapy treatment monitoring”.

G. Llosa, J. Roser, Enrique Muñoz Albaladejo, Luis Barrientos, John Barrio, Jose Bernabeu, Marina Borja, Ane Etxebeste, J. F. Oliver, Leticia Gabarda, Carlos Lacasta, Ana Ros Garcia.

Oral presentation¹

2018

- 2018 “**IEEE Medical Imaging Conference**”, held in Sydney (Australia). Nov 10 - Nov 17, 2018

“Calculation and impact of the sensitivity model for a two-plane Compton camera.”.

E. Muñoz, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, A. Etxebeste, L. Gabarda, C. Lacasta, G. Llosá, A. Ros, J. Roser, C. Solaz and J. F. Oliver.

Poster presentation¹

- 2018 “**IEEE Medical Imaging Conference**”, held in Sydney (Australia). Nov 10 - Nov 17, 2018

“Evaluation and Validation of a Sensitivity Model for a Three-layer LaBr 3 Compton Telescope”.

J. Roser, E. Muñoz, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, A. Etxebeste, L. Gabarda, C. Lacasta, G. Llosá, A. Ros, and J. F. Oliver.

Poster presentation¹

- 2018 “**IEEE Medical Imaging Conference**”, held in Sydney (Australia). Nov 10 - Nov 17, 2018

“First results with MACACO II: second prototype of a Compton telescope.”.

A. Ros, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, P. Dendooven, A. Etxebeste, L. Gabarda, J. García López, M.C. Jimenez-Ramos, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, I. Ozoemelum, J. Roser, C. Senra, C. Solaz and G. Llosá.

Poster presentation¹

- 2018 **“hird Geant4 International User Conference at the Physics-Medicine-Biology frontier”**, held in Bordeaux (France). 29 - 31 Oct, 2018

“A GATE module for Compton camera simulation.”.

A. Etxebeste, Y. Feng, J. M. Létang, G. Llosá, V. Maxim, E. Muñoz, J. F. Oliver, A. Ros, E. Testa and D. Sarrut.

Talk presentation¹

- 2018 **“PM2018 - 14th Pisa Meeting on Advanced Detectors La Biodola,”**, held in Elba (Italy). 27 May - 2 Jun, 2018

“MACACO II: second prototype of a Compton telescope for hadron therapy monitoring ”.

A. Ros, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, A. Etxebeste, L. Gabarda, J. García López, M.C. Jimenez-Ramos, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, J. Roser, C. Solaz and G. Llosá.

Talk presentation¹

- 2018 **“II Jornadas RSEF / IFIMED de Física Médica”**, held in Madrid (Spain). Jun 14- 15, 2018

“Evaluation and Validation of a Sensitivity Model for a Three-layer LaBr3 Compton Telescope”.

J. Roser, Enrique Muñoz Albaladejo, Luis Barrientos, John Barrio, Jose Bernabeu, Marina Borja, Ane Etxebeste, Leticia Gabarda, Carlos Lacasta, Gabriela Llosa, Ana Ros Garcia, J. F. Oliver

Oral presentation¹

- 2018 **“II Jornadas RSEF / IFIMED de Física Médica”**, held in Madrid (Spain). Jun 14- 15, 2018

“Evaluation of LFS continuous scintillation crystals for PET”.

A. Ros, J. Roser, Enrique Muñoz Albaladejo, Luis Barrientos, John Barrio, Jose Bernabeu, Marina Borja, Ane Etxebeste, Leticia Gabarda, Carlos Lacasta, J. F. Oliver and Gabriela Llosa.

Oral presentation¹

- 2018 **“II Jornadas RSEF / IFIMED de Física Médica”**, held in Madrid (Spain). Jun 14- 15, 2018

“Calculation and impact of the sensitivity matrix for a two-plane Compton camera”.

Enrique Muñoz Albaladejo, Luis Barrientos, John Barrio, Jose Bernabeu, Marina Borja, Ane Etxebeste, Leticia Gabarda, Carlos Lacasta, Gabriela Llosa, Ana Ros Garcia, Jorge Roser, C. Solaz J. F. Oliver

Poster¹

- 2018 “**PM2018 - 14th Pisa Meeting on Advanced Detectors**”, held in Elba (Italy). May 27 - Jun 2, 2018

“*Evaluation of LFS continuous scintillation crystals for PET*”.

A. Ros, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, A. Etxebeste, L. Gabarda, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, A. Ros, J. Roser, C. Solaz and G. Llosá.

Poster ¹

- 2018 “**PM2018 - 14th Pisa Meeting on Advanced Detectors**”, held in Elba (Italy). May 27 - Jun 2, 2018

“*MACACO II: second prototype of a Compton telescope*”.

A. Ros, L. Barrientos, J. Barrio, J. Bernabéu, M. Borja-Lloret, A. Etxebeste, L. Gabarda, C. Lacasta, R. Marco, E. Muñoz, J. F. Oliver, A. Ros, J. Roser, C. Solaz and G. Llosá.

Poster ¹

- 2018 “**II workshop español de protonterapia**”, held in Sevilla (Spain). March 15-16, 2018

“*Desarrollo de un telescopio Compton para la monitorización de dosis*”.

J.F.Oliver on behalf of IRIS group.

Invited oral presentation

- 2018 “**Jornadas Técnicas del Instituto de Física Corpuscular**”, held in Valencia (Spain). March 13, 2018

“*Puesta en marcha del laboratorio de imagen pre-clínica PET/CT del IFIMED (IFIC)*”.

J.F.Oliver

Oral presentation

- 2018 “**Jornadas Técnicas del Instituto de Física Corpuscular**”, held in Valencia (Spain). March 13, 2018

“*Computing at IRIS*”.

J.F.Oliver on behalf of IRIS group.

Oral presentation

2017

- 2017 “**IX CPAN days**”, held in Santander (Spain). October 23-25, 2017

“*Mejoras en la respuesta de MACACO, un telescopio Compton para la monitorización en terapia hadrónica*”.

G. Llosá, J. Barrio, A. Etxebeste, L. Granado, C. Lacasta, E. Muñoz, J.F.Oliver, A. Ros, J. Roser and C. Solaz

Oral presentation ¹

- 2017 “**IEEE Medical Imaging Conference**”, held in Atlanta (USA). October 21-28, 2017

“*Improving MACACO, a Compton Telescope for Treatment Monitoring in Hadron Therapy*”.

John Barrio, Marina Borja-Lloret, Ane Etxebeste, Leticia Gabarda, Laura Granado, Carlos Lacasta, Enrique Muñoz, J F Oliver, Ana Ros, Jorge Roser, Carles Solaz and Gabriela Llosá.

Oral presentation¹

- 2017 “**IEEE Medical Imaging Conference**”, held in Atlanta (USA). October 21-28, 2017

“Impact of the ring resolution on the performance of the dual ring high resolution silicon PET”.

A. Studen, V. Cindro, N. H. Clinthorne, H. Kagan, E. Kalšek, C. Lacasta, G. Llosa, M. Mikuz, J.F. Oliver, D. Žontar

Poster presentation¹

- 2017 “**XXXVI Reunión bienal RSEF, simposio especializado del GEFM**”, held in Santiago de Compostela (Spain). 17-21 July, 2017.

“Performance improvement of MACACO, a Compton telescope for treatment monitoring in hadron therapy.”.

G. Llosá, J. Barrio, A. Etxebeste, L. Granado, C. Lacasta, E. Muñoz, J. F. Oliver, C. Solaz.

Oral presentation¹

- 2017 “**New Developments in Photodetection, NDIP 2017**”, held in Tours (France). 3-7 July, 2017.

“Performance Improvement Tests of a Compton Telescope based on Continuous Crystals and SiPMs.”.

J. Barrio, A. Etxebeste, L. Granado, C. Lacasta, E. Muñoz, J. F. Oliver, A. Ros, C. Solaz and G. Llosá.

Oral presentation¹

- 2017 “**New Developments in Photodetection, NDIP 2017**”, held in Tours (France). 3-7 July, 2017.

“Final tests with MACACO: a Compton telescope for hadron therapy treatment monitoring.”.

G. Llosá, J. Barrio, A. Etxebeste, P.G. Ortega, C. Lacasta, E. Muñoz, J. F. Oliver, C. Solaz.

Oral presentation¹

- 2017 “**V MEDAMI workshop**”, held in Orosey (Italy). 20 May - 4 Jun, 2017.

“From MACACO to MACACO II: a Compton telescope for treatment monitoring in hadron therapy.”.

G. Llosá, J. Barrio, A. Etxebeste, L. Granado, C. Lacasta, E. Muñoz, J. F. Oliver, A. Ros, C. Solaz.

Oral presentation¹

————— 2016 —————

- 2016 “**VIII CPAN days**”, held in Zaragoza (Spain). November 28-30, 2016

“IFIMED status and results of a Compton telescope for hadron therapy. ”.

G. Llosá, J. Barrio, A. Etxebeste, L. Granado, C. Lacasta, E. Muñoz, J.F. Oliver, A. Ros, J. Roser and C. Solaz

Oral presentation¹

- 2016 “**Particle Therapy Co-operative Group, PTCOG**”, held in Prague (Czech Republic). 22-28 May, 2016.

“Laboratory and beam tests of a Compton Telescope for treatment monitoring”.

E. Muñoz; J. Barrio; A. Etxebeste; C. Lacasta; J.F. Oliver; P.G. Ortega; C. Solaz; G. Llosá.

Oral presentation¹

- 2016 “**In-vivo Dosimetry Workshop**”, held in Munich (Germany). 19-20 May, 2016.

“Recent Laboratory and Test Beam Results of a Compton Telescope for Treatment Monitoring”.

E. Muñoz, J. Barrio, A. Etxebeste, C. Lacasta, J. F. Oliver, P. G. Ortega, C. Solaz, P. Solevi and G. Llosá.

Oral presentation¹

- 2016 “**MEDAMI 2016 - IV Mediterranean Thematic Workshop in Advanced Molecular Imaging**”, held in Corsica (Italy). 1-5 May, 2016.

“Fast SiPM readout for PET ”.

David Sánchez, David Gascon, Ricardo Graciani, John Barrio, Gabriela Llosá, Jesús Marín, Josep F. Oliver, José Manuel Perez, Pedro Rato, Iciar Sarasola

Oral presentation¹

- 2016 “**MEDAMI 2016 - IV Mediterranean Thematic Workshop in Advanced Molecular Imaging**”, held in Corsica (Italy). 1-5 May, 2016.

“Compton Telescope for hadron therapy range monitoring: update on characterization results and beam tests. ”.

Gabriela Llosá, John Barrio, Ane Etxebeste, Carlos Lacasta, Enrique Muñoz, Josep F. Oliver, Pablo G. Ortega, Carles Solaz, Paola Solevi.

Oral presentation¹

- 2016 “**IEEE Medical Imaging Conference**”, held in Strasbourg (France). November

“Improved Laboratory and in-Beam Results of a Compton Telescope with LaBr3 and SiPMs ”.

Enrique Muñoz; John Barrio; José Bernabéu; Ane Etxebeste; Carlos Lacasta; Josep F. Oliver; Pablo G. Ortega; Carles Solaz; Gabriela Llosá.

Poster presentation¹

- 2016 “**IEEE Medical Imaging Conference**”, held in Strasbourg (France). November

“Magnetic Field Compatible Buck Converters and Optical Link”.

R. Becker, A. Buck, C. Casella, V. Commichau, G. Dissertori, J. Fischer, A. S. Howard, M. Ito, P. Khateri, K. Kramer, W. Lustermann, J.F. Oliver, C. Ritzer, U. Röser, Q. Wang, G. Warnock and B. Weber

Poster presentation¹

- 2016 “**IEEE Medical Imaging Conference**”, held in Strasbourg (France). November

“*SAFIR: High Rate Test inside of MR bore and the assessment of a MR-compatibility*”.

R. Becker, A. Buck, C. Casella, V. Commichau, G. Dissertori, J. Fischer, A. S. Howard, M. Ito, P. Khateri, K. Kramer, W. Lustermann, J.F. Oliver, C. Ritzer, U. Röser, Q. Wang, G. Warnock and B. Weber

Poster presentation¹

- 2016 “**IEEE Medical Imaging Conference**”, held in Strasbourg (France). November

“*Evaluation of Geometrical Arrangements of High Resolution Sensors in PET Probe Configuration*”.

A. Studen, V. Cindro, N. H. Clinthorne, H. Kagan, C. Lacasta, G. Llosa, M. Mikuž, J. F. Oliver and D. Žontar

Poster presentation¹

- 2016 “**IEEE Medical Imaging Conference**”, held in Strasbourg (France). November

“*Evaluation and validation of sensitivity models for a Compton Telescope*”.

P. G. Ortega, E. Muñoz, A. Etxebeste, J. Barrio, C. Lacasta, G. Llosá, C. Solaz, J. F. Oliver

Poster presentation¹

- 2016 “**I Jornadas RSEF / IFIMED de Física Médica**”, held in Valencia (Spain). Mar 10–11.

“*Position determination in continuous crystals for PET*”.

Ane Etxebeste, John Barrio, Enrique Muñoz, Josep F. Oliver, Carles Solaz, Gabriela Llosá

Oral presentation¹

- 2016 “**I Jornadas RSEF / IFIMED de Física Médica**”, held in Valencia (Spain). Mar 10–11.

“*Pruebas en Laboratorio y Haz de un Telescopio Compton para Monitorización de Terapia Hadrónica*”.

E. Muñoz, John Barrio, Ane Etxebeste, Josep F. Oliver, Carles Solaz, Gabriela Llosá

Oral presentation¹

- 2016 “**I Jornadas RSEF / IFIMED de Física Médica**”, held in Valencia (Spain). Mar 10–11.

“*Monitorización de la terapia hadrónica en tiempo real*”.

Gabriela Llosá; John Barrio; Ane Etxebeste; Carlos Lacasta; Enrique Muñoz; Josep F. Oliver; Pablo G. Ortega; Carles Solaz

Oral presentation¹

- 2016 “**European Molecular Imaging Meeting, EMIM 2016**”, held in Utrecht (Netherlands). Mar 8–10.

“*High rate tests on SiPM readout ASICs for the SAFIR project*”.

C. Casella on behalf of SAFIR collaboration

Poster presentation¹

- 2016 “**International Conference on Translational Research in Radio-Oncology — Physics for Health in Europe, ICTR-PHE 16**”, held in Geneva (Switzerland). Feb. 15-19, 2016.

“Increasing PET scanner resolution using a silicon detector probe”.

K. Brzezinski, J. F. Oliver, J. Gillam and M. Rafecas

Poster presentation¹. Best poster award winner.

- 2016 “**International Conference on Translational Research in Radio-Oncology — Physics for Health in Europe, ICTR-PHE 16**”, held in Geneva (Switzerland). Feb. 15-19, 2016.

“Characterization and test beam results of a LaBr 3 Compton Telescope for treatment monitoring”.

G.Llosá, J.Barrio, A.Etxebeste, C.Lacasta, J.F. Oliver, P.G. Ortega, C.Solaz, P.Solevi.

Poster presentation¹

2015

- 2015 “**14th Vienna Conference on Instrumentation**”, held in Vienna (Austria). Feb 15-19.

“The SAFIR project: Status and perspectives”.

C. Casella on behalf of SAFIR collaboration

Oral presentation¹

- 2015 “**IEEE Medical Imaging Conference**”, held in San Diego (USA). Nov 3-7.

“Brain PET Imaging Based on the Axial PET Concept: a Simulation Study”.

P. Solevi, G. Reyéns-Llompart, J. Cabello, J. Gillam, C. Joram, J. F. Oliver and M. Rafecas

Poster presentation¹

- 2015 “**IEEE Medical Imaging Conference**”, held in San Diego (USA). Nov 3-7.

“Simulation of a Compton Telescope with GATE”.

E. Muñoz, J. Barrio, A. Etxebeste, C. Lacasta, G. Llosá, C. Solaz, P. Solaz, P. Solevi, M. Trovato and J. F. Oliver.

Oral presentation¹

- 2015 “**IEEE Medical Imaging Conference**”, held in San Diego (USA). Nov 3-7.

“A Compton Telescope for Ion-Beam Therapy Monitoring: from Monte Carlo Modeling to First on-Beam Tests”.

Solevi, P.;Muñoz, E.;Solaz, C.;Trovato, M.;Barrio, J.;Dendooven, P.;Etxebeste, A.;Gillam, J. E.;Lacasta, C.;J. F. Oliver;Rafecas, M.;Torres-Espallardo, I.;Llosá, G.

Oral presentation¹

- 2015 “**IEEE Medical Imaging Conference**”, held in San Diego (USA). Nov 3-7.

“Characterization and Simulation Results of a Two/Three-Layer Compton Telescope with LaBr3 and SiPMs”.

Muñoz, E.;Barrio, J.;Etxebeste, A.;Lacasta, C.;J. F. Oliver;Solaz, C.;Solevi, P.;Trovato, M.;Llosa, G.

Poster presentation¹

- 2015 **“IEEE Medical Imaging Conference”**, held in San Diego (USA). Nov 3-7.
“*Study of Sensitivity and Resolution for a Small Animal PET Ring Based on Continuous Crystals*”.

Etxebeste, A.;Barrio, J.;Lacasta, C.;Llosá, G.;Muñoz, E.;Solaz, C.;Solevi, P.;J. F. Oliver

Poster presentation¹

- 2015 **“IEEE Medical Imaging Conference”**, held in San Diego (USA). Nov 3-7.
“*Monte-Carlo Simulation Based Estimation of NECR, Sensitivity, and Spatial Resolution of a Novel Preclinical PET Insert for MR*”.

J. Fischer, R. Becker, J.P. Cachemiche, G. Dissertori, A. Howard, K. Kramer, W. Lustermann, C. Morel, J. F. Oliver, U. Roser, Q. Wang, B. Weber.

Poster presentation¹

- 2015 **“IVICFA. Medical Physics Workshop”**, held in Valencia (Spain).
“*Present and future of the IFIMED research activities in medical imaging: Image Science*”.

J. F. Oliver.

Invited oral presentation

- 2015 **“La Física del Cancer”**, held in Valencia (Spain). Jun 19.
“*Applications of particle physics to treatment and monitoring in hadrontherapy*”.

J.F. Oliver

Invited oral presentation

- 2015 **Fully-3D**, held in Newport (USA). May 31, Jun 4
“*List-Mode Reconstruction from Raw Detector Signals: An Embedded Detection Model for Monolithic Crystals*”.

Jorge Cabello, Magdalena Rafecas, John E. Gillam and J.F. Oliver

Poster presentation¹

2014

- 2014 **“IEEE Medical Imaging Conference”**, held in Seattle (USA).
“*A Three Layer Compton Telescope for Dose Monitoring in Hadron Therapy*”.
M. Trovato, P. Solevi, J. Barrio, J. Cabello, J. E. Gillam, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova, I. Torres-Espallardo, G.Llosá
- 2014 **“IEEE Medical Imaging Conference”**, held in Seattle (USA).
“*Beam Model Inclusion Into Compton Camera Image Reconstruction*”.
P. Solevi, I. Torres-Espallardo, John E. Gillam, C. Lacasta, G. Llosa, M. Rafecas, C. Solaz, M. Trovato and J. F. Oliver
- 2014 **“IEEE Medical Imaging Conference”**, held in Seattle (USA).
“*Monte Carlo Simulation of a Continuous Crystal Coupled to a SiPM Array*”.
A. Etxebeste, J. Cabello, J. Barrio, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz and G. Llosá

Poster presentation¹

- 2014 “**IEEE Medical Imaging Conference**”, held in Seattle (USA).
“Towards a High-Resolution Full-Ring Small-Animal PET Based on Continuous Crystals and SiPMs”.
 J. Barrio, J. Cabello, A. Etxebeste, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova, S. Ziegler and G. Llosá

Oral presentation¹

- 2014 “**II Symposium on Positron Emission Tomography**”, held in Krakow (Poland). September, 21-24
“AX-PET: from demonstrator towards a full-ring brain scanner”.
 P. Solevi on behalf of AX-PET collaboration.

Invited oral presentation¹

- 2014 “**II Symposium on Positron Emission Tomography**”, held in Krakow (Poland). September, 21-24
“European ENVISION project for improving timing resolution in PET systems”.
J. F. Oliver on behalf of ENVISION members.

Invited oral presentation

- 2014 “**II Symposium on Positron Emission Tomography**”, held in Krakow (Poland). September, 21-24
“Estimation of accidental coincidences in PET”.
J. F. Oliver and M. Rafecas

Invited oral presentation

- 2014 “**II Symposium on Positron Emission Tomography**”, held in Krakow (Poland). September, 21-24
“Development of a high resolution animal PET with monolithic crystals and silicon photomultipliers”.
 G. Llosá, J. Cabello, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz.

Invited oral presentation¹

- 2014 “**MEDAMI 2014 - III Mediterranean thematic workshop in advanced molecular imaging**”, held in Sardinia (Italy). September, 3-7.
“Three-layer Compton telescope with continuous LaBr3 crystals and SiPMs”.
 G. Llosá, J. Cabello, J.E. Gillam, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, P. Solevi, V. Stankova, I. Torres-Espallardo, M. Trovato

Oral presentation.¹

- 2014 “**ICTR-Physics for health in Europe**”, held in Geneve (Switzerland). February, 10-14.
“A three layer Compton telescope for dose monitoring in hadron therapy”.
 M. Trovato, J. Barrio, J. Cabello, J. E. Gillam, C. Lacasta, J.F. Oliver, M. Rafecas, C. Solaz, P. Solevi, V. Stankova, I. Torres-Espallardo and G. Llosá.

Poster presentation¹

- 2014 “**ICTR-Physics for health in Europe**”, held in Geneve (Switzerland). February, 10-14.

“Different detector concepts for several imaging scenarios: from hadrontherapy monitoring to clinical imaging”.

P. Solevi, I. Torres-Espallardo, J.E. Gillam, M. Trovato, J.F. Oliver, J. Cabello, G. Llosaá, J. Barrio, C. Solaz, M. Rafecas, C. Lacasta

Poster presentation¹

2013

- 2013 **“NIRS Workshop on PET imaging physics and applications, PIPA2013”**, held in Yokohama (Japan). 4-5 Nov 2013.

“Developement of a three layer Compton telescope prototype based on continuous LaBr3 crystals and silicon photomultipliers”.

M. Trovato, J. Barrio, P. Botas, J. Cabello, J. E. Gillam, C. Lacasta, J.F. Oliver, M. Rafecas, C. Solaz, P. Solevi, V. Stankova I. Torres-Espallardo and G. Llosá

Oral presentation¹

- 2013 **“NIRS Workshop on PET imaging physics and applications, PIPA2013”**, held in Yokohama (Japan). 4-5 Nov 2013.

“Evaluation of open-ring imaging systems for range verification in proton-therapy by means of secondary radiation”.

I. Torres-Espallardo, J.E. Gillam, P. Solevi, P. Ortega, P. Botas, J.F. Oliver, G. Llosá, M. Trovato, C. Solaz, C. Lacasta and M. Rafecas.

Oral presentation¹

- 2013 **“Advancements in Nuclear Instrumentation Measurement Methods and their Applications (ANIMMA), 2013 3rd International Conference on”**, held in Marseille (France). 23-27 June 2013.

“Second LaBr3 compton telescope prototype”.

G. Llosa, J Cabello, J.E. Gillam, C. Lacasta, J.F. Oliver, M. Rafecas, C. Solaz, P. Solevi, V. Stankova, I. Torres-Espallardo, M. Trovato

Oral presentation¹.

- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).

“Long axial crystals for PET applications: the AX-PET demonstrator and beyond”.

E. Bolle, C. Casella, E. Chesi, R. De Leo, G. Dissertori, V. Fanti, J.E. Gillam, M. Heller, C. Joram, W. Lustermann, E. Nappi, J.F. Oliver, F. Pauss, M. Rafecas, A. Rudge, U. Ruotsalainen, D. Schinzel, T. Schneider, J. Seguinot, P. Solevi, S. Stapnes, U. Tuna, P. Weilhammer

Oral presentation¹.

- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).

“Developement of a three layer Compton telescope prototype based on continuous LaBr crystal and silicon photomultipliers”.

M. Trovato, J. Barrio, P. Botas, J. Cabello, J.E. Gillam, C. Lacasta, J.F. Oliver, M. Rafecas, C. Solaz, P. Solevi, V. Stankova, I. Torres, G. Llosa

Poster presentation¹.

- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).
“Optimizing secondary radiation imaging systems for range verification in hadron-therapy”.
 I. Torres, J.E. Gillam, P. Solevi, P.G Ortega, H. Rohling, P. Botas, J.F. Oliver, G. Llosa, C. Solaz, M. Trovato, C. Lacasta and M. Rafecas
Poster presentation¹.
- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).
“The application of the axial PET concept to novel imaging scenarios”.
 P. Solevi, I. Torres, J.E. Gillam, J. Cabello, J.F. Oliver and M. Rafecas.
Poster presentation¹.
- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).
“Noise evaluation of prompt-gamma technique for proton-therapy range verification using a Compton Camera”.
 P. G. Ortega, I. Torres-Espallardo, T. T. Böhlen, F. Cerutti, M. P. W. Chin, A. Ferrari, J. E. Gillam, C. Lacasta, G. Llosá, J. Oliver, M. Rafecas, P. R. Sala, P. Solevi
Poster presentation¹.
- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).
“Electronics Upgrade and Crystal Geometry Optimization for a Sub-millimeter Small Animal PET Based on Continuous Crystals and SiPMs”.
 J. Barrio, J. Cabello, A. Etxebeste, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova and G. Llosá
Poster presentation¹.
- 2013 **“IEEE Medical Imaging Conference”**, held in Seoul (Korea).
“Sensitivity Enhancement Using Triple-Coincidence Events in the AXPET Demonstrator.”.
 J. Gillam, P. Solevi, J. F. Oliver,, C. Casella, M. Heller, C. Joram and M. Rafecas
Poster presentation¹.
- 2013 **“IVICFA. Medical Physics Workshop”**, held in Valencia (Spain).
“Accurate Modelling for enhancing image quality in Emission Tomography”.
J. F. Oliver.
Invited oral presentation
- 2013 **“Reunión Bienal de la Real Sociedad Española de Física”**, held in Valencia (Spain).
“Fotomultiplicadores de silicio y aplicaciones a la física médica”.
 G. Llosá, J. Barrio, J. Cabello, J. E. Gillam, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova, I. Torres, M. Trovato.
Oral presentation¹
- 2013 **“Reunión Bienal de la Real Sociedad Española de Física”**, held in Valencia (Spain).
“Tomógrafo PET de alto rendimiento basado en la tecnología cristal continuo/SiPM”.

A. Etxebeste, J. Barrio, J. Cabello, J. E. Gillam, C. Lacasta, G. Llosá, J. F. Oliver, M. Rafecas .

Oral presentation¹

- 2013 “**Reunión Bienal de la Real Sociedad Española de Física**”, held in Valencia (Spain).

“Range monitoring in protontherapy by means of secondary radiation detection”.

I. Torres, J. E. Gillam, P. García, J. Cabello, J. F. Oliver, G. Llosá, M. Trovato, C. Solaz, C. Lacasta, M. Rafecas.

Oral presentation¹

- 2013 “**Reunión Bienal de la Real Sociedad Española de Física**”, held in Valencia (Spain).

“Introducing the research activities developed within the Grupo de Física en la Imagen Médica”.

Josep F. Oliver.

Oral presentation

- 2013 “**CPAN Workshop on Technology Transfer**”, held in Sevilla (Spain).

“Imaging the guts: Introducing the Image Science Research developed in the Group IRIS”.

Josep F. Oliver

Oral presentation

- 2013 “**13th Vienna Conference on Instrumentation**”, held in Vienna (Austria).

“Imaging of phantoms and small animals with the AX-PET demonstrator”.

C. Joram (on behalf of the AX-PET collaboration).

Oral presentation¹

2012

- 2012 “**IEEE Medical Imaging Conference**”, held in Anaheim (USA).

“Simulated One Pass Listmode for Fully 3D Image Reconstruction of Compton Camera Data”.

J. E. Gillam, J. F. Oliver, I. Torres-Espallardo, C. Lacasta, G. Llosa, M. Trovato, J. Barrio, J. Cabello, V. Stankova, C. Solaz, M. Rafecas

Poster presentation

- 2012 “**IEEE Medical Imaging Conference**”, held in Anaheim (USA).

“Towards a Sub-Millimeter PET Prototype with Continuous LYSO Crystals and SiPM Matrices”.

G. Llosa, P. Barrillon, J. Barrio, M. G. Bisogni, J. Cabello, A. Del Guerra, A. Etxebeste, J. E. Gillam, C. Lacasta, C. De La Taille, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova.

Oral presentation¹

- 2012 “**IEEE Medical Imaging Conference**”, held in Anaheim (USA).

“Singles Prompts Randoms: Estimation of Spurious Data Rates in PET”.

Josep F. Oliver and M. Rafecas.

Poster presentation

- 2012 “**IEEE Medical Imaging Conference**”, held in Anaheim (USA).
“Monolithic crystals on SiPM arrays in a prototype system with depth of interaction Estimation”.
 J. Cabello, J. E. Gillam, J. F. Oliver, J. Barrio, M. Rafecas and G. LLosá.

Poster presentation

- 2012 “**IEEE Medical Imaging Conference**”, held in Anaheim (USA).
“Studies for Performance Improvement of a Small Animal PET Prototype Based on Continuous LYSO Crystals and SiPM Matrices”.
 J. Barrio, P. Barrillon, M. G. Bisogni, J. Cabello, A. Del Guerra, A. Etxebeste, C. Lacasta, J. F. Oliver, M. Rafecas, C. Solaz, V. Stankova, C. de La Taille, G. Llosa.

Poster presentation

- 2012 “**ICTR-PHE, 2012**”, held in Geneve (Switzerland).
“Silicon photomultipliers in pet and hadrontherapy applications”.
 G. Llosá, J. Barrio, M. M. Bisogni, J. Cabello, A. D. Guerra, J. Gillam, C. Lacasta, J. Oliver, M. Rafecas, C. Solaz, V. Stankova, I. Torres-Espallardo .

Poster presentation

- 2012 **2012 Biomedical Imaging (ISBI), 2012 9th IEEE International Symposium on**, held in Spain.
“Inclusion of inter crystal scatter data in PET”.
 J. E. Gillam, P. Solevi, Josep F. Oliver and M. Rafecas.

Poster presentation

- 2012 **2012 Photodet 2012-ORSAY**
“Application of continuous crystals and SiPM arrays to PET and Compton detector
 G. LLosá, P. Barillon, J. Barrio, M. G. Bisogni, J. Cabello, S. Callier, A. Del Guerra, J. E. Gillam, C. Lacasta, C. De la Taille, J.F. Oliver, M. Rafecas, L. Raux, C. Solaz, V. Stankova and M. Trovato

Oral presentation¹

————— 2011 —————

- 2011 “**IEEE Medical Imaging Conference**”, held in Valencia (Spain).
“The AX-PET Concept: New Developments and Tomographic Imaging”.
 M. Rafecas (on behalf of the AX-PET collaboration).

Oral presentation¹

- 2011 “**IEEE Medical Imaging Conference**”, held in Valencia (Spain).
“Development of a PET Prototype with Continuous LYSO Crystals and Monolithic SiPM Matrices”. G. Llosá, J. Barrio, J. Cabello, C. Lacasta, Josep F. Oliver, M. Rafecas, C. Solaz, P. Barrillon, C. de la Taille, S. Bondil-Blin, C. Piemonte, M. G. Bisogni, A. Del Guerra.

Poster presentation¹

- 2011. “**IEEE Medical Imaging Conference**”, held in Valencia (Spain).
“*Simulated One-Pass List-Mode: a highly flexible method of image reconstruction for PET*”.

Poster presentation¹

2010

- 2010. “**IEEE Medical Imaging Conference**”, held in Knoxville (USA).
“*MuST, Multiples Enhanced ST Method for Randoms Rate Estimations*”.

Poster presentation.

- 2010. “**IEEE Medical Imaging Conference**”, held in Knoxville (USA).
“*Reduction of Random Coincidences in Small Animal PET using Artificial Neural Networks*”.

Poster presentation¹

- 2010. “**IEEE Medical Imaging Conference**”, held in Knoxville (USA).
“*Polar Voxelization Schemes Combined with a Monte-Carlo based System Matrix for Image Reconstruction in High Resolution PET*”.

Poster presentation¹

- 2010. “**IEEE Medical Imaging Conference**”, held in Knoxville (USA).
“*AXPET: Concept, Proof of Principle and First Results with Phantoms*”.

Poster presentation¹

- 2010. “**SNM 2010 Annual Meeting**”, held in Salt Lake City (USA).
“*Reducing random coincidences in PET by using Artificial Neural Networks*”.

Poster presentation.

- 2010. “**SNM 2010 Annual Meeting**”, held in Salt Lake City (USA).
“*AX-PET: Demonstration of an axial PET concept for brain and small animal imaging*”. AXPET collaboration.

Oral presentation.

- 2010. “**ENIM2010, European Molecular Imaging Meeting**”, held in Warsaw (Poland).
“*Monte-Carlo modelling of a silicon detector insert combined with a PET scanner*”.

Poster presentation¹

- 2010. “**Physics for Health in Europe**”, held in Geneve (Switzerland).
“*Demonstration of an Axial PET concept for Brain and Small Animal Imaging*”. AXPET collaboration.

Oral presentation¹.

- 2010. “**12th Topical Seminar on Innovative Particle and Radiation Detector**”, held in Siena (Italy).
“*The AX-PET Demonstrator: Performance and firsts results*”. AXPET collaboration.

Oral presentation¹.

2009

- 2009. “**IEEE Medical Imaging Conference**”, held in Orlando (USA). “*First Results from the AX-PET Demonstrator*”. AXPET collaboration. **Oral presentation**¹.
- 2009. “**7th International Hiroshima Symposium on the Development and Application of Semiconductor and Tracking Detectors**”, held in Hiroshima (Japan). “*Construction and Tests of Demonstrator Modules for a 3-D Axial PET System for Brain or Small Animal Imaging*”. AXPET collaboration. **Oral presentation**¹.
- 2009. “**11th ICATPP Conference on Astroparticle, Particle, Space Physics, Detectors and Medical Physics Applications**”, held in Como (Italy). “*AX-PET, a demonstrator for PET imaging using long axially oriented scintillating crystals*”. AXPET collaboration. **Oral presentation**¹.
- 2009. “**10th International Meeting on Fully Three Dimensional Image Reconstruction in Radiology and Nuclear Medicine**”, held in Beijing (China). “*ML-EM Implementation on a GPU: Avoiding Simultaneous Read-Modify-Write Processes*”. **Poster presentation**¹.
- 2009. “**ENLIGHT Meeting**”, held in Valencia (Spain). Assistance.
- 2009. “**IFIMED’09 Symposium: Research on Imaging and Accelerators Applied to Medicine**”, held in Valencia (Spain). *Physics in medical imaging group at IFIC*. **Oral presentation**¹.

2008

- 2008. “**The first international conference on Technology and Instrumentation in Particle Physics**”, held in Tsukuba (Japan). “*Development of a High Precision Axial 3D PET System for Brain Imaging*”. AXPET collaboration. **Oral presentation**¹.
- 2008. “**11th Topical Seminar on Innovative Particle and Radiation Detectors**”, to be held in Siena (Italy). “*Development of a High Precision Axial 3-D PET for Brain Imaging*”. AXPET collaboration. **Oral presentation**¹.
- 2008. “**IEEE Medical Imaging Conference**”, held in Dresden (Germany). “*An AXial PET demonstrator*”. AXPET collaboration. **Poster presentation**¹.
- 2008. “**IEEE Medical Imaging Conference**”, held in Dresden (Germany). “*Coincidence Identification in PET Using Neural Networks*”. **Poster presentation**¹.
- 2008. “**IEEE Medical Imaging Conference**”, held in Dresden (Germany). “*Comparison of Coincidence Identification Techniques for High Resolution PET*”. **Poster presentation**.
- 2008. “**IEEE Medical Imaging Conference**”, held in Dresden (Germany). “*Revisiting the singles rate method for modeling accidental coincidences in PET*”. **Poster presentation**.
- 2008. “**EANM 2008 Annual Congress of the European Association of Nuclear Medicine**”, held in Munich (Germany). “*Development and performance of a new detector concept for high resolution PET based on wave length shifters and Geiger-mode APDs*”. AXPET collaboration. **Oral presentation**¹.

- 2008. “**NDIP08 New Developments in Photodetection 2008**”, held in Aix-les-Bains (France). “*AXPET - A novel PET detector concept with full 3D reconstruction.*”. AXPET collaboration. **Poster presentation.**
- 2008. “**SNM 2008 Annual meeting**”, held in New Orleans (EEUU). “*Estimation of random coincidences: revisiting the singles rate (SR) method for high resolution PET*”. **Poster presentation.**
- 2008. “**XXIX congreso SEMN**”, held in Valencia (Spain). “*Nuevos detectores para imágenes médicas multimodalidad*”. Oral presentation¹.
- 2008. “**2008 Symposium on Radiation Measurements and Applications**”, held in California (EEUU). “*The AX-PET project: progress and recent results*”. AXPET collaboration. Oral presentation.

2008

- 2007. “**Xth EFOMP Congress**”, held at Pisa (Italy). “*Modelling Coincidence Sorting Strategies for singles list-mode data in small animal PET*”. **Oral presentation.**
- 2007. “**IFIMED: Research on imaging and accelerators applied to medicine**”, held at Valencia (Spain). Assistance.
- 2005. **Dark Matters** held at Brussels (Belgium).
- 2004. **Terrestrial and Cosmic Neutrinos, leptogenesis and Cosmology** held at Benasque (Spain).
- 2004. **XXXII International meeting on fundamental physics** held at Alicante (Spain).
- 2003. **COSMO 03** held at Ambleside (United Kingdom).
- 2003. **Applications of Effective Field Theories** held at Milano (Italy).
- 2002. **XXX International meeting on fundamental physics** held at Jaca. (Spain).
- 2000. **QCD 2000** held at Benasque (Spain).
- 2000. **XXVIII International meeting on fundamental physics** held at Cádiz (Spain).

Training Courses

- 2023 **Medical Image Reconstruction: from Foundations to AI @ IEEE** . (9 h). Organized by IEEE.
- 2023 **Artificial intelligence in nuclear medicine image analysis and processing @ IEEE** . (9 h). Organized by IEEE.
- 2023 **Project Management**. (4 days). Organized by Bruker Corp.
- 2022 **Image Reconstruction @ IEEE** . (4 h). Organized by IEEE.
- 2022 **Machine Learning @ IEEE** . (9 h). Organized by IEEE.
- 2021 **Total Body PET Image Reconstruction @ IEEE** . (2 h). Organized by IEEE.

- 2021 **Medical Image Reconstruction @ IEEE** . (9 h). Organized by IEEE.
- 2019 **Synergistic Reconstruction Symposium**. (2 days). Organized by the collaborations CCP-PET-MR and CCPi. Chester (UK). November 5-6, 2019.
- 2018. **Radiological protection in radiopharmacy**. (13h). Organized by University of Valencia. June, 2018.
- 2017. **Category: C. Procedures realization of animals for experiments**. (40h). Organized by University of Valencia. March, 2017.
- 2017. **Categories: A+B. Care of animals for experiments. Euthanasia of animals for experiments**. (30h). Organized by University of Valencia. March, 2017.
- 2016. **Quality and Security in Software**. Organized by mobiliza academy (14 h). Jul 8, 2016.
- 2016. **Training for using Veenstra activimeters**. Organized by radiaprot health-care radiation (1.5 h). Jul 6, 2016.
- 2016. **Control of radioactive instalations in research centers**. Organized by Service of prevention of CSIC (3 h). Jun 28, 2016.
- 2014. **Course of Advanced C++**. Organized by CSIC.
From Apr 10, 2014 to Apr 16, 2014 (40 hours). Valencia (Spain)
- 2013. **Apollo XIII. Excellence in managing processes**. Organized by CSIC.
From Apr 22, 2013 to Apr 23, 2013 (16 hours). Valencia (Spain)
- 2013. **Supervisor of Radioactive Facilities License**
Issued by (Spanish) National Security Council, CSN.
Application field: Laboratory with non encapsulated sources
Validity: Nov 11, 2013 / Nov 11, 2023
- 2013. **Supervisor of Radioactive Facilities Course**, Certified by (Spanish) National Security Council, CSN.
- 2008. **IEEE Cours on Image Reconstruction**, Dresden (Germany).
- 2008. **Cours GRID y e-Ciencia**, Valencia (Spain).
- 2007. **GATE for newcomers tutorial**, Clermont-Ferrand (France).
- 2007. **Cours Geant4 Paris 2007**, Paris (France).
- 2001. **ICTP - (The Abdus Salam) International Center for Theoretical Physics**, Italy.
- 2000. **BUSSTEP 2000**, Oxford (U. Kingdom).
- 1999. **Summer Student Program of CERN**, Geneva (Switzerland).
- 1998. **Summer Student Program of GSI**, Darmstadt (Germany).

Stays in other centers

- 2016 Invited by the **Swiss Federal Institute of Technology in Zurich (Eidgenössische Technische Hochschule, ETH)** to work as a consultant on a MRI PET project at CERN, Geneva (Switzerland). From Jun. 13 to Jun. 18, 2016 (1 week).

- 2014. Invited by the **Swiss Federal Institute of Technology in Zurich (Eidgenössische Technische Hochschule, ETH)** to work as a consultant on a MRI PET project at CERN, Geneva (Switzerland). From Sep. 29 to Nov. 2, 2014 (five weeks).
- 2011. **Université de Sherbrooke**. Sherbrooke (Canada). (Less than four weeks)
Two weeks
- 2008. **Université de Sherbrooke**. Sherbrooke (Canada). (Less than four weeks)
Two weeks
- 2003. **IPPP - Institute for particle physics phenomenology**, Durham (U. Kingdom). Two months.
- 2001. **SISSA - Scuola Internazionale Superiore di Studi Avanzati**, Trieste (Italy). Three months.

Publications

ARTICLES

- [1] – “**Emission-based attenuation correction for small animal PET-MR using conditional generative adversarial networks**”.

Jonathan Fisher, Josep F. Oliver and Craig Levin

Under revision. (2023)

IF: ?.??? Q?

ISSN: ???-???. DOI: ????

2021

- [2] – “**Performance evaluation of MACACO II Compton camera**”.

L. Barrientos, M. Borja-Lloret, A. Etxebeste, E. Muñoz, J.F. Oliver, A. Ros, J. Roser, C. Senra, R. Viegas and G. Llosá

Nuclear Inst. and Methods in Physics Research, A. 1014 (2021)

IF(JCR): 1.4 Q3 . Cites(WoS): 27

ISSN: 2045-2322.

DOI: 10.1016/j.nima.2021.165702; URI: hdl.handle.net/10261/346648

- [3] – “**Proton range verification with MACACO II Compton camera enhanced by a neural network for event selection**”.

E. Muñoz, A. Ros, M. Borja-Lloret, J. Barrio, P. Dendooven, Josep F. Oliver, I Ozoemelum, J. Roser and G. dLlosá

Nature Scien. Rep. 11, 9325 (2021)

IF(WoS): 4.997 Q2 . Cites(WoS): 36

ISSN: 2045-2322.

DOI: <https://doi.org/10.1038/s41598-021-88812-5>. URI: hdl.handle.net/10261/346567

2020

- [4] – **“MACACO II test-beam with high energy photons”**.
 A. Ros Garcia, J. Barrio, A. Etxebeste, J. Garcia-Lopez, M.C. Jimenez-Ramos, C. Lacasta, E. Muñoz, J.F. Oliver, J. Roser and G. Llosa
Phys. Med. Bio. 65, 24027 (2020)
 IF(JCR): 3.609 Q2. Cites(WoS): 13
 ISSN: : 0031-9155.
 DOI: 10.1088/1361-6560/abc5cd URI: hdl.handle.net/10261/346642
- [5] – **“Image reconstruction for a multi-layer Compton Telescope: an analytical model for three interaction events”**.
 J. Roser, E. Muñoz, L. Barrientos, J. Barrio, J. Bernabéu Alberola, M. Borja-Lloret, A. Etxebeste, G. Llosa, A. Ros, R. Viegas and J.F. Oliver.
Phys. Med. Biol. 65 (2020) 14
 IF(JCR): 3.609 Q2 . Cites(WoS): 10
 ISSN: 0031-9155.
 DOI: <https://doi.org/10.1088/1361-6560/ab8cd4>. URI: hdl.handle.net/10261/390168
- [6] – **“CCMod: a GATE module for Compton Camera imaging simulation”**.
 A. Etxebeste, D. Dauvergne, M. Fontana, J.M. Letang, G. Llosa, E. Muñoz, J.F. Oliver, E. Testa and D.Sarrut
Phys. Med. Biol. 65 (2020) 5
 IF(JCR): 3.609 Q2 . Cites(WoS): 19
 ISSN: 0031-9155.
 DOI: 10.1088/1361-6560/ab6529 URI: hdl.handle.net/10261/346580
- [7] – **“A spectral reconstruction algorithm for two-plane Compton cameras”**.
 E. Muñoz, L. Barrientos, J. Bernabéu, M. Borja-Lloret, G. Llosá, A. Ros, J. Roser and J.F. Oliver.
Phys. Med. Biol. 65 (2020) 025011
 IF: 3.609 Q2 . Cites(WoS): 22
 ISSN: 0031-9155.
 DOI: 10.1088/1361-6560/ab58ad URI: hdl.handle.net/10261/346583
-
- 2019
-
- [8] – **“Evaluation of LFS continuous scintillation crystals for PET”**. A.Ros, L.Barrientos, J.Barrio, A.Etxebeste, C.Lacasta, E.Muñoz, J.F.Oliver, J.Roser and G.Llosá.
Nucl. Inst. Meth. A 936 (2019) 39-40
 IF: 1.265 Q3 . Cites(WoS): 1
 ISSN: 0168-9002.
 DOI: 10.1016/j.nima.2018.11.020
- [9] – **“Study of Sensitivity and Resolution for Full Ring Prototypes based on Continuous Crystals and analytical modeling of the light distribution”**.
 Ane Etxebeste, John Barrio, G. Llosa, Enrique Muñoz, Carles Solaz and J.F. Oliver.
Phys. Med. Biol. 64 (2019) 035015 (17pp)

(JCR) IF: 2.883 Q2(JIF) Q1(JCI) . Cites(WoS): 4
 ISSN: 0031-9155. DOI: 10.1088/1361-6560/aaf7ba

2018

- [10] – “**Study and comparison of different sensitivity models for a two-plane Compton Telescope**”.

E. Muñoz, J. Barrio, J. Bernabeu, A. Etxebeste, C. Lacasta, G. Llosá, A. Ros, J Roser and J.F. Oliver

Phys. Med. Biol. 63 (2018) 135004 (19pp)

(JCR) IF: 3.030 Q2(JIF) Q1(JCI) . Cites(WoS): 30

ISSN: 0031-9155. DOI: 10.1088/1361-6560/aac8cd.

- [11] – “**Tests of MACACO Compton telescope with 4.44 MeV gamma rays**”.

E. Muñoz, J. Barrio, D. Bemmerer, A. Etxebeste, F. Fiedler, F. Hueso-González, C. Lacasta, J. F. Oliver, K. Römer, C. Solaz, L. Wagner, and G. Llosá

Journal of Instrumentation 13 (2018) 1

(SJR) IF: 1.366 Q1 . Cites(WoS): 6.

ISSN: 1748-0221. DOI: 10.1088/1748-0221/13/05/P05007

- [12] – “**Performance improvement tests of MACACO: a Compton telescope based on continuous crystals and SiPMs**”.

J. Barrio, A. Etxebeste, L. Granado, E. Muñoz, J.F. Oliver, A. Ros, J. Roser, C. Solaz and G. Llosa

Nucl. Inst. Meth. A 912 (2018) 48-52

(JCR) IF: 1.433 Q1 Cites(WoS): 16

ISSN: 0031-9155. DOI: 10.1016/j.nima.2017.10.033

2017

- [13] – “**Performance evaluation of MACACO: a multilayer Compton Camera**”.

E. Muñoz, J. Barrio, A. Etxebeste, P.G. Ortega, C. Lacasta, Josep F. Oliver, C. Solaz, and G. Llosa.

Phys. Med. Bio. 62 (2017) 7321

(JCR) IF: 2.665 Q1 .Cites(WoS): 34

ISSN: 0031-9155. DOI: 10.1088/1361-6560/aa8070

- [14] – “**The SAFIR Experiment: Concept, status and perspectives**”.

Robert Becker, Alfred Buck, Chiara Casella, Günther Dissertori, Jannis Fischer, Alexander Howard, Mikiko Ito, Parisa Khateri, Werner Lustermann, J.F. Oliver, Ulf Röser, Geoffrey Warnock, Bruno Weber

Nucl. Instr. Meth. A 845, (2017) 648-651

(JCR) IF: 1.2 Q1 .Cites(WoS): 11

ISSN: 0168-9002. DOI: 10.1016/j.nima.2016.05.037

2016

- [15] – “**Modelling Random Coincidences in Positron Emission Tomography by Using Singles and Prompts: a Comparison Study**”.
J.F. Oliver and R.Rafecas.
PLoS ONE (2016), 11, 9
 (JCR) IF: 2.806 Q1 . Cites(WoS): 13
 ISSN: 1932-6203. DOI: 10.1371/journal.pone.0162096
- [16] – “**Experimental evaluation of the resolution improvement provided by a silicon PET probe**”.
 K. Brzeziński, J.F. Oliver, J. Gillam, M. Rafecas, A. Studen, M. Grkovski, H. Kagan, S. Smith, G. Llosá, C. Lacasta and N.H. Clinthorne
Jour. Inst. (2016), 11
 (SJR) IF: 1.220 Q1 . Cites(WoS): 4
 ISSN: 1748-0221. DOI: 10.1088/1748-0221/11/09/P09016
- [17] – “**Performance of MACACO Compton Telescope for Ion-Beam Therapy Monitoring: first test with proton beams**”. P. Solevi, E. Muñoz, C. Solaz, M. Trovato, P. Dendooven, J. Gillam, C. Lacasta, Josep F. Oliver, M. Rafecas, I. Torres-Espallardo and G. LLosá.
Phys. Med. Bio. 61 (2016) 5149
 (JCR) IF: 2.742 Q1 . Cites (WoS): 47.
 ISSN: 0031-9155. DOI: 10.1088/0031-9155/61/14/5149
- [18] – “**3D position determination in monolithic crystals coupled to SiPMs for PET**”. Ane Etxebeste, John Barrio, Enrique Muñoz, J. F. Oliver, Carles Solaz and Gabriela Llosá
Phys. Med. Bio. 61 (2016) 3914
 (JCR) IF: 2.742 Q1 .Cites(WoS): 18
 ISSN: 0031-9155. DOI: 10.1088/0031-9155/61/10/3914
- [19] – “**First Images of a Three-layer Compton Telescope prototype for Treatment Monitoring in hadron Therapy**”. G. Llosá, M. Trovato, J. Barrio, A. Etxebeste, E. Muñoz, C. Lacasta, Josep F. Oliver, M. Rafecas, C. Solaz and P. Solevi.
Front. Oncol. 6, 14
 (SJR) IF: 4.416 Q1 .Cites(WoS): 36
 ISSN: 2234-943X. DOI: 10.3389/fonc.2016.00014

 2015

- [20] – “**Performance of VATA64HDR16 ASIC for medical physics applications based on continuous crystals and SiPMs**”. J. Barrio, A. Etxebeste, C. Lacasta, E. Muñoz, J.F. Oliver, C. Solaz and G. Llosá.
Jour. Inst. 10 (2015), 12001
 (SJR) IF: 1.310 Q1 . Cites(WoS): 10.
 ISSN: 1748-0221. DOI: 10.1088/1748-0221/10/12/P12001

- [21] – “**Noise evaluation of Compton camera imaging for proton therapy**”. P G Ortega, I Torres-Espallardo, F Cerutti, A Ferrari, J E Gillam, C Lacasta, G Llosá, J F Oliver, P R Sala, P Solevi and M Rafecas
Phys. Med. Biol. 60 (2015), 1845 – 1863
 (JCR) IF: 2.811 Q1 Cites(WoS): 45
 ISSN: 0031-9155. DOI: doi:10.1088/0031-9155/60/5/1845

2014

- [22] – “**Study of a high-resolution PET system using a silicon detector probe**”. K. Brzezinski, J.F. Oliver, John E. Gillam and Magdalena Rafecas
Phys. Med. Biol., 59 (2014) 6117 – 6140
 (JCR) IF: 2.761 Q1 Cites: 15
 ISSN: 0031-9155. DOI: 10.1088/0031-9155/59/20/6117
- [23] – “**Sensitivity Recovery for the AX-PET Prototype Using Inter-Crystal Scattering Events**”. John E. Gillam, Paola Solevi, J.F. Oliver, Chiara Casella, Matthieu Heller, Christian Joram and Magdalena Rafecas
Phys. Med. Biol. 59, 4065 – 4083
 (JCR) IF: 2.761 Q1 Cites(WoS): 23
 ISSN: 0031-9155. DOI: 10.1088/0031-9155/59/15/4065

2013

- [24] – “**Application of Artificial Neural Network for reducing random coincidences in PET**”. Josep F. Oliver, E. Fuster-García, J. Cabello, S. Tortajada and M. Rafecas.
IEEE Trans. on Nucl. Sci. 60, 5, 3399-3409.
 (JCR) IF: 1.219 Q1 Cites(WoS): 9
 ISSN: 0018-9499.
 DOI: 10.1109/TNS.2013.2274702; URI: <http://hdl.handle.net/10261/412617>
- [25] – “**A Monte–Carlo based model of the AX-PET demonstrator and its experimental validation**”. P. Solevi, J. F. Oliver, J. E. Gillam, E. Bolle, C. Casella, E. Chesi, R. De Leo, G. Dissertori, V. Fanti, M. Heller, M. Lai, W. Lustermann, E. Nappi, F. Pauss, A. Rudge, U. Ruotsalainen, D. Schinzel, T. Schneider, J. Seguinot, S. Stapnes, P. Weilhammer, U. Tuna, C. Joram, M. Rafecas
Phys. Med. Biol., 58 (2013) 5495–5510
 (JCR) IF: 2.922 Q1 Cites(WoS): 5
 ISSN: 0031-9155. DOI: 10.1088/0031-9155/58/16/5495
- [26] – “**Simulated one-pass list-mode: an approach to on-the-fly system matrix calculation**”. J. E. Gillam, P. Solevi, J.F. Oliver and M Rafecas
Phys. Med. Biol., 58 (2013) 2377–2394
 (JCR) IF: 2.922 Q1 Cites(WoS): 15
 ISSN: 0031-9155.
 DOI: 10.1088/0031-9155/58/7/2377; URI: <http://hdl.handle.net/10261/412847>

- [27] – “**The AX-PET experiment: A demonstrator for an axial Positron Emission Tomography**”. E. Bolle, C. Casella, E. Chesi, R. De Leo, G. Dissertori, V. Fanti, J.E. Gillam, M. Heller, C. Joram, W. Lustermann, E. Nappi, J.F. Oliver, F. Pauss, M. Rafecas, A. Rudge, U. Ruotsalainen, D. Schinzel, T. Schneider, J. Seguinot, P. Solevi, S. Stapnes, U. Tuna, P. Weilhammer
Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 718 (2013) 126–129
 (SJR) IF: 1.142 Q1 Cites(inSPIRE): 2
 ISSN: 0168-9002. DOI: 10.1016/j.nima.2012.07.054
- [28] – “**High performance detector head for PET and PET/MR with continuous crystals and SiPMs**”. G. Llosá, P. Barrillon, J. Barrio, M.G. Bisogni, J. Cabello, A. Del Guerra, A. Etxebeeste, J.E. Gillam, C. Lacasta, J.F. Oliver, M. Rafecas, C. Solaz, V. Stankova, C. de La Taille
Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 702 (2013) 3–5.
 (SJR) IF: 1.142 Q1 Cites(WoS): 15
 ISSN: 0168-9002. DOI: 10.1016/j.nima.2012.08.099

2012

- [29] – “**AX-PET: A novel PET concept with G-APD readout**”. E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. DeLeo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, Josep F. Oliver, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes, P. Weilhammer
Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 695 (2012) 129–134.
 (SJR) IF: 1.142 Q1 Cites(WoS): 3
 ISSN: 0168-9002. DOI: 10.1016/j.nima.2011.12.114

2011

- [30] – “**The AX-PET demonstrator—Design, construction and characterization**”. P. Beltrame, E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, R. De Leo, G. Dissertori, L. Djambazov, V. Fanti, M. Heller, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, J.F. Oliver, F. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Séguinot, P. Solevi, S. Stapnes, P. Weilhammer
Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 654 (2011) 546–559
 (SJR) IF: 1.207 Q1 Cites(WoS): 32
 ISSN: 0168-9002.
 DOI: 10.1016/j.nima.2011.06.059; URI: <http://hdl.handle.net/10261/412648>
- [31] – “**Demonstration of an Axial PET concept for brain and small animal imaging**”. P. Beltrame, E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, R. De Leo, G. Dissertori, L. Djambazov, V. Fanti, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, Josep F. Oliver, F. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Séguinot, P. Solevi, S. Stapnes and P. Weilhammer

Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 628 (2011) 426–429

(SJR) IF: 1.207 Q1 Cites(WoS): 4

ISSN: 0168-9002. DOI: 10.1016/j.nima.2010.07.017

- [32] – “**Construction and tests of demonstrator modules term for a 3-D axial PET system for brain or small animal imaging term**”. P. Beltrame, E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. De Leo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, J.F. Oliver, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes and P. Weilhammer.

Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 636 (2011) S226–S230.
Cites(WoS): 3

(SJR) IF: 1.207 Q1 Cites(WoS): 3

ISSN: 0168-9002. DOI: 10.1016/j.nima.2010.04.115

2010

- [33] – “**Improving the singles rate method for modeling accidental coincidences in high-resolution PET**”. Josep F. Oliver and M. Rafecas

Phys. Med. Biol., 55 (2010) 6951–6971

(JCR) IF: 3.057 Q1 Cites(WoS): 11

ISSN: 0031-9155.

DOI: 10.1088/0031-9155/55/22/022; URI: <http://hdl.handle.net/10261/412613>

- [34] – “**The AX-PET project: Demonstration of a high resolution axial 3D PET**”. E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. DeLeo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, Josep F. Oliver, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes, P. Weilhammer

Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 617 (2010) 214–216.
Cites(WoS): 2

(SJR) IF: 1.142 Q1

ISSN: 0168-9002.

DOI: 10.1016/j.nima.2009.10.009; URI: hdl.handle.net/10261/411643

- [35] – “**Real time coincidence detection engine for high count rate timestamp based PET**”. M.A. Tetrault, Josep F. Oliver, M. Bergeron, R. Lecomte and R. Fontaine.

IEEE Trans. on Nucl. Sci. Vol. 57 (2010) 117–124.

(JCR) IF: 1.524 Q1 Cites(WoS): 23

ISSN: 0018-9499.

DOI: 10.1109/TNS.2009.2038055; URI: hdl.handle.net/10261/382788

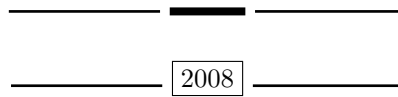
2009

- [36] – “**AX-PET: A novel PET detector concept with full 3D reconstruction**”. A. Braem, C. Joram, J. Séguinot, G. Dissertori, L. Djambazov, W. Lustermann, F. Nessi-Tedaldi, F. Pauss, D. Schinzel, P. Solevi, C. Lacasta, Josep F. Oliver, M. Rafecas, R. De Leo, E. Nappi, I. Vilardi, E. Chesi, E. Cochran, K. Honscheid, H. Kagan, A. Rudge, S. Smith, P. Weilhammer, I. Johnson, D. Renker, N. Clinthorne, S. Huh, E. Bolle, S. Stapnes and F. Meddi
Nucl. Inst. Meth. Phys. Res. Sec. A; NIM A, 610 (2009) 192–195 Cites.
 (WoS): 15

(SJR) IF: 1.317 Q1 Cites(WoS): 11

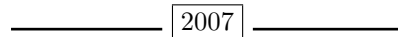
ISSN: 0168-9002.

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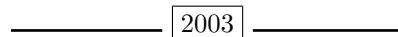


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- [86] – “**Reducing random coincidences in PET by using Artificial Neural Networks**”. Josep F. Oliver, E. Fuster, S. Tortajada, J. Cabello y M. Rafecas.
 Contribution to “**2010 SNM Annual Meeting**” held at Salt Lake City (USA) from 4-8 June 2008.
Suppl. Jour. Nucl. Med. (2010) Vol. 51, Suppl. 2. ISSN: 0161-5505.
- [87] – “**AX-PET: Demonstration of an axial PET concept for brain and small animal imaging**”. Josep F. Oliver, E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. DeLeo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes, P. Weilhammer.
 Contribution to “**2010 SNM Annual Meeting**” held at Salt Lake City (USA) from 4-8 June 2008.
Suppl. Jour. Nucl. Med. (2010) Vol. 51, Suppl. 2. ISSN: 0161-5505.
-
- 2009
-
- [88] – “**Development of a High Precision Axial 3-D PET for Brain Imaging**”. E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. DeLeo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, Josep F. Oliver, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes, P. Weilhammer.

Contribution to “**11th Topical Seminar on Innovative Particle and Radiation Detectors**” held at Siena (Italy), Oct 1 2008.

Nucl. Phys. B (Proc. Suppl.) 197 (2009) 19–23. ISBN: 0920-5632. DOI: 10.1016/j.nuclphysbps.2009.10.026. Cites: 2.

- [89] – “**First Results from the AX-PET Demonstrator**”. E. Bolle, A. Braem, C. Casella, E. Chesi, N. Clinthorne, E. Cochran, R. DeLeo, G. Dissertori, G. Djambazov, V. Fanti, K. Honscheid, S. Huh, I. Johnson, C. Joram, H. Kagan, W. Lustermann, F. Meddi, E. Nappi, F. Nessi-Tedaldi, Josep F. Oliver, P. Pauss, M. Rafecas, D. Renker, A. Rudge, D. Schinzel, T. Schneider, J. Seguinot, S. Smith, P. Solevi, S. Stapnes, P. Weilhammer

Contribution to “**2009 IEEE Nucl. Sci. Symp.**” held at Orlando, FL (USA), Oct 25-31.

2009 IEEE Nucl. Sci. Symp. Med. Imag. Conf. Rec. Vol. 1-5, 3096–3101. ISSN:1082-3654. DOI: 10.1109/NSSMIC.2009.5401673

- [90] – “**ML-EM Implementation on a GPU: Avoiding Simultaneous Read-Modify-Write Processes**”. T. Felder, M. Blume, Josep F. Oliver, and M. Rafecas.
Contribution to “**10th International Meeting on Fully Three-Dimensional Image. Reconstruction in Radiology and Nuclear Medicine**” held at Beijing (China), Sep 5-10 2008.
2009 Int. Meet. Proc. 10th Fully 3D Meeting and 2nd HPIR Workshop 65–68.

2008

- [91] – “**A Demonstrator for a new Axial PET Concept**”. AXPET collaboration.
Contribution to “**IEEE NSS-MIC**” held at Dresden (Germany), Oct 19-25 2008.
2008 IEEE Nucl. Sci. Symp. Med. Imag. Conf. Rec. Vol. 1-9, 3844–3847. ISSN:1082-3654.
- [92] – “**Coincidence Identification in PET Using Neural Networks**”. E. Fuster-Garcia, Josep F. Oliver, S. Tortajada and M. Rafecas.
Contribution to “**IEEE NSS-MIC**” held at Dresden (Germany), Oct 19-25 2008.
2008 IEEE Nucl. Sci. Symp. Med. Imag. Conf. Rec. Vol. 1-9, 4001–4004. ISSN:1082-3654.
- [93] – “**Comparison of Coincidence Identification Techniques for High Resolution PET**”. Josep F. Oliver, I. Torres-Espallardo, R. Fontaine, S.I. Ziegler and M. Rafecas.
Contribution to “**IEEE NSS-MIC**” held at Dresden (Germany), Oct 19-25 2008.
2008 IEEE Nucl. Sci. Symp. Med. Imag. Conf. Rec. Vol. 1-9, 4005–4008. ISSN:1082-3654.
- [94] – “**Revisiting the singles rate method for modeling accidental coincidences in PET**”. Josep F. Oliver and M. Rafecas.
Contribution to “**IEEE NSS-MIC**” held at Dresden (Germany), Oct 19-25 2008.
2008 IEEE Nucl. Sci. Symp. Med. Imag. Conf. Rec. Vol. 1-9, 4288–4291. ISSN:1082-3654.

- [95] – “**Estimation of Random Coincidences: Revisiting the singles rate method for modeling accidental coincidences in PET**”. Josep F. Oliver and M. Rafecas.

Contribution to “**2008 SNM Annual Meeting**” held at Los Angeles (USA) from 14-18 June 2008.

Suppl. Jour. Nucl. Med. (2008) Vol. 49, Suppl. 1. ISSN: 0161-5505.

————— 2004 —————

- [96] – “**Power corrections in models with extra dimensions.**”. Josep F. Oliver, A. Santamaria and J. Papavassiliou.

Contribution to “**International Europhysics Conference on High-Energy Physics (HEP 2003)**” held at Aachen, Germany, 17-23 Jul 2003. (hep-ph/0310085).

European Phys. Jour. C (2004) Vol. 33, Supl. 1, pages: S911-S913. Cites: 3.

ISSN: 1434-6044.

DOI: 10.1140/epjcd/s2003-03-1103-9 URI: <http://hdl.handle.net/10550/43017>

————— 2003 —————

- [97] – “**B physics and extra dimensions**”. Josep F. Oliver, J. Papavassiliou and A. Santamaria.

Contribution to “**Beauty 2002: 8th International Conference on B Physics at Hadron machines**” held at Santiago de Compostela, Spain, 17-21, Jun 2002. (hep-ph/0209021).

Cites(WoS): 2.

Nucl.Phys.Proc.Suppl.120:210-215,2003 .Cites: 0. ISSN: 0920-5632.

DOI:10.1016/S0920-5632(03)01904-2. URI: <http://hdl.handle.net/10550/43012>.

BOOK CHAPTERS

————— 2014 —————

- [98] – “**Nuclear Physics for Medicine**”.

“**Chapter II. Medical Imaging.**”. Faïçal Azaiez, David Brasse, Piergiorgio Cerello, Christophe de La Taille, Alberto Del Guerra, Peter Dendooven, Wolfgang Enghardt, Fine Fiedler, Ian Lazarus, Guillaume Montemont, Christian Morel, Alex Murphy, J. F. Oliver, Katia Parodi, Marlen Priegnitz, Magdalena Rafecas, Christoph Scheidenberger, Paola Solevi, Peter G. Thirolf, Irene Torres-Espallardo, Jose Manuel Udias

Editors:Faïçal Azaiez, Angela Bracco, Jan Dobeš, Ari Jokinen, Gabriele-Elisabeth Körner, Adam Maj, Alexander Murphy and Piet Van Duppen.

Editorial: Nuclear Physics European Collaboration Committee (NuPECC)

URL: <http://www.nupecc.org/pub/npmed2014.pdf>

ISBN: 978-2-36873-008-9



Reviewing Activities

ASSESSMENT AND REVIEW OF R+D+I PROJECTS

- 2015 Reviewer in assessment of R+D+I projects. Call FONCYT of Ministry of Science, Technology and productive innovation (National Agency of Scientific and Technologic promotion), ANPCT. Argentina.

REVIEWER IN JOURNALS

- “**IEEE Transactions on Radiation and Plasma Medical Sciences, IEEE TRPMS**”. ISSN: (print) 2469-7311 / (electronic) 2469-7303.
- “**Physics in Medicine & Biology**”. ISSN: 0031-9155.
- “**IEEE Transactions on Medical Imaging**”. ISSN: 0278-0062.
- “**IEEE Transactions on Nuclear Science**”. ISSN: 0018-9499.
- “**Nuclear Instruments and Methods A**”. ISSN: 0168-9002.
- “**Journal of Instrumentation**”. ISSN: 1748-0221.
- “**Applied Radiation and Isotopes**”. Ed. Elsevier. ISSN: 0969-8043.
- “**Central European Journal of Physics**”. ISSN: 1895-1082.
- “**Medical Physics. The international Journal of Medical Physics Research and Practice**”. Ed. John Wiley and Sons Ltd. ISSN: 942405.

Participation in Organizing/Advisor Committees

- 2018. Member of the Scientific Committee. **II Jornadas RSEF/IFIMED** held in Madrid, Jun. 14-15, 2018
- 2018. Member of the Organizing Committee. **II Jornadas RSEF/IFIMED** held in Madrid, Jun. 14-15, 2018
- 2016. Member of the Organizing Committee. **I Jornadas RSEF/IFIMED** held in Valencia, Apr. 11, 2016

- 2015. Member of the Organizing Committee. **“IVICFA’s Fridays: Medical Physics** held in Valencia, Oct 16, 2015
- 2014. Member of the **advisor committee** of the **“II Symposium on Positron Emission Tomography”** held at the Jagiellonian University, Krakow (Poland). September 21 - 24.
- 2014. Co-organizer of **“EXPOCIENCIA 2014”** held at the IFIC, Valencia May 24th.
- 2013 Course organization **“Sensors and their readout electronics”** held at the IFIC, Valencia Sep. 9-13.
- 2013. Co-organizer of **“EXPOCIENCIA 2013”** held at the IFIC, Valencia May 25th.
- 2012. Co-organizer of **“EXPOCIENCIA 2012”** held at the IFIC, Valencia May 19th.
- 2011. Co-organizer of **“EXPOCIENCIA 2011”** held at the IFIC, Valencia Jun 30th.
- 2010. Co-organizer of **“EXPOCIENCIA 2010”** held at the IFIC, Valencia May 30th.
- 2009. Co-organizer of **“PARTNER-IFIC Training Course: Detectors and Accelerators applied in Medicine”** held in Valencia, 12-17 June 2009.
- 2009. Member of the Organizing Committee. **“IFIMED’09 Symposium: Research on Imaging and Accelerators Applied to Medicine”** held in Valencia, 10-11 June 2009.
- 2007. Member of the Organizing Committee. **“IFIMED”**.

Quality Evaluations

Accreditations

- Accredited by **AEI**² for **“Certificate I3. Area FIS, Physical science”**.
- Accredited by **AEI**³ for **“Certificate R3. Area FIS, Physical science”**.
- Accredited by **ANECA** for **“Profesor Contratado Doctor, PCD”**.
- Accredited by **ANECA** for **“Profesor Ayudante Doctor, PAD”**.
- Accredited by **ANECA** for **“Profesor de Universidad Privada, PUP”**.
- Accredited by **AVAP** for **“Profesor Contratado Doctor, PCD”**.
- Accredited by **AVAP** for **“Profesor Ayudante Doctor, PAD”**.
- Accredited by **AVAP** for **“Profesor de Universidad Privada, PUP”**.
- Accredited by **U. Valencia** for **“Curso de Aptitud Pedagógica, CAP”**.

Teaching quality evaluation processes

²Agencia Estatal de Investigación-Ministerio de Universidades

³Agencia Estatal de Investigación-Ministerio de Universidades

- **7.3/10.** *Foundations of Physics*, Civil Engineering at Politechnial University of Valencia, UPV.

Teaching experience

University

- 2023-2024. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2023-2024. *Radiation detectors in medicine*. Mod:43074. 5 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2022-2023

- 2022-2023. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2022-2023. *Radiation detectors in medicine*. Mod:43074. 5 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2021-2022

- 2021-2022. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2021-2022. *Radiation detectors in medicine*. Mod:43074. 5 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2020-2021

- 2020-2021. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2020-2021. *Radiation detectors in medicine*. Mod:43074. 9 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2019-2020

- 2019-2020. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2019-2020. *Radiation detectors in medicine*. Mod:43074. 7 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2018-2019

- 2018-2019. *Mathematics I*. Mod:34870. 30 hours. **Associated Professor in Technical School of Engineering**. University of Valencia, UV.
- 2018-2019. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 6 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2018-2019. *Radiation detectors in medicine*. Mod:43074. 5 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2017-2018

- 2018. *Física Médica*. 2 hours, included in **Plan de formación permanente del profesorado**. Organized by Secretaria Autonómica de Educación e Investigación de la Conselleria de Educación, Investigación, Cultura y Deporte. University of Valencia, UV.
- 2017-2018. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 5 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2017-2018. *Radiation detectors in medicine*. Mod:43074. 5 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2016-2017

- 2017. *Física Médica*. 2 hours, included in **Plan de formación permanente del profesorado**. Organized by Secretaria Autonómica de Educación e Investigación de la Conselleria de Educación, Investigación, Cultura y Deporte. University of Valencia, UV.
- 2016-2017. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 10 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2016-2017. *Radiation detectors in medicine*. Mod:43074. 10 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2015-2016

- 2015-2016. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 15 hours, included in **Master in Advanced Physics**. University of Valencia, UV. In charge of the “Image reconstruction” sections.
- 2015-2016. *Radiation detectors in medicine*. Mod:43074. 15 hours, included in **Master in Medical Physics**. University of Valencia, UV.

2014-2015

- 2014-2015. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 2 ECTS (15 hours) included in **Master in Advanced Physics**. University of Valencia, UV.

In charge of the “Image reconstruction” sections.

- 2014-2015. *Radiation detectors in medicine*. Mod:43074. 1 ECTS(8 hours) included in **Master in Medical Physics**. University of Valencia, UV.

2013-2014

- 2013-2014. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 2 ECTS (16 hours) included in **Master in Advanced Physics**. University of Valencia, UV.

In charge of the “Image reconstruction” sections.

- 2013-2014. *Radiation detectors in medicine*. Mod:43074. 1 ECTS(10 hours) included in **Master in Medical Physics**. University of Valencia, UV.

2012-2013

- 2012-2013. *Medical applications of the Nuclear and Particle Physics*. Mod:43303. 2 ECTS (16 hours) included in **Master in Advanced Physics**. University of Valencia, UV.

In charge of the “Image reconstruction” sections.

- 2012-2013. *Radiation detectors in medicine*. Mod:43074. 1 ECTS(10 hours) included in **Master in Medical Physics**. University of Valencia, UV.

2011-2012

- 2011-2012. *Foundations of Physics (theory)*. Associated Professor partial time (type I). Subject included in **Escuela Técnica Superior de Ingeniería de Caminos, Canales y Puertos** (Civil Engineering). 4 ECTS. Politechnical University of Valencia, UPV.

From October 14th, 2011 to January 31st, 201-2; (8 hours/week).

- 2011-2012. *Physics of diagnosis and therapy*. Mod:40322. 1 ECTS(10 hours) included in **Master in Medical Physics**. University of Valencia, UV.

In charge of the “Image reconstruction” sections.

- 2011-2012. *Radiation detection and measurement*. Mod:40325. 1 ECTS(10 hours) included in **Master in Medical Physics**. University of Valencia, UV.

2010-2011

- 2010-2011. *Physics in diagnosis and therapy*. Mod:40322. 1 ECTS(10 hours) included in **Master in Medical Physics**. University of Valencia, UV.

In charge of the “Image reconstruction” sections.

2002-2003

- 2002-2003 *Experimental techniques in Quantum Physics*. 1.5 credits (15 hours). Classes delivered in valencian in the Univ. of Valencia, UV.
- 2002-2003 *Quantum Physics*. 22.5 credits (22.5 hours). Classes delivered in valencian in the Univ. of Valencia, UV.

————— 2001-2002 —————

- 2001-2002 *Experimental techniques in Quantum Physics*. 1.5 credits (15 hours). Classes delivered in valencian in the Univ. of Valencia, UV.
- 2001-2002 *Quantum Physics*. 1.5 credits (15 hours). Classes delivered in valencian in the Univ. of Valencia, UV.

Congresses

- 2010. Course of *Imaging in Nuclear Medicine* (4 hours). Classes delivered in the **Third MADEIRA TRAINING COURSE: ‘Imaging in Nuclear Medicine’** held in Munich, 5-8 October.
- 2009. Course of *Image Reconstruction* (2 hours). Classes delivered in the **PARTNER-IFIC TRAINING COURSE: ‘Detectors and Accelerators applied in Medicine’** held in Valencia, 12-17 June.

Non-university

- 2000. Classes at “Instituto de Bachillerato Nuestra Señora del Socorro”, secondary school.
- 2000-2004. Particular classes for secondary school students.

Students

PH.D. THESIS

- 2015-2023. Co-advisor of Mr. Jorge Roser **Ph.D. Thesis** in Medical Physics. *April, 2023*.
“Improving Image Quality in a multi-plane Compton Telescope for Hadron Therapy Monitoring”
 Program **Atracció de Talent** (competitive public call) associated to **U. Valencia**. Award “Prize of the Real Spanish Society of Physics (RSEF) to the best Ph.D. Thesis in the applied Physics”.
<https://hdl.handle.net/10550/88702>
- 2015-2019. Co-advisor of Mr. E. Muñoz Albaladejo **Ph.D. Thesis** in Medical Physics. *Dec 2, 2019*.
“Development of a reconfigurable multi-plane Compton camera for hadron therapy dose monitoring”
 Program **Atracció de Talent** (competitive public call) associated to **U. Valencia**.
<https://hdl.handle.net/10550/72178>

- 2012-2017. Co-advisor of Miss A. Etxebeste Barrena **Ph.D. Thesis** in Medical Physics. *Jul 14, 2017.*
“Performance Enhancement of a Small Animal Positron Emission Tomograph based on Continuous Crystals and Silicon Photomultipliers”
 Program **Atracció de Talent** (competitive public call) associated to **U. Valencia**.
<http://hdl.handle.net/10550/59463>
- 2009-2015. Co-advisor of Mr. Karol Brzezinski’s **Ph.D. Thesis** in Medical Physics. *Jul 18, 2015.*
“Study of a high-resolution PET system using a silicon detector probe”
 Program **JAE Pre** (competitive public call) associated to **CSIC**.
<http://hdl.handle.net/10550/44367>

MASTER THESIS

- 2024. Advisor of Mr. Aitor Ruiz Rodríguez’s **Master Thesis**.
“Simulation of a non-pure beta-emitting radioisotope measured in a preclinical PET scanner”.
- 2018. Co-advisor of Miss Marina Borja’s **Master Thesis**.
“Study of the spatial resolution of a Compton Telescope for hadron-therapy monitoring”.
- 2017. Co-advisor of Mr. Jorge Roser’s **Master Thesis**.
“Spatial resolution determination of medical devices by using bayesian estimators”.
- 2013. Co-advisor of Mr. Enrique Muñoz’s **Master Thesis**.
“Characterization and modelization of a two-plane Compton Telescope”.
- 2013. Co-advisor of Mr. Gabriel Reynes’s **Master Thesis**.
“The AX-PET principle applied to Hadron Therapy dose monitoring”
- 2012. Co-advisor of Miss Ane Miren Etxebeste Barrena’s **Master Thesis**.
“Characterization and modelization of detectors based in monolithic crystals/SiPM for Positron Emission Tomography”
- 2008. Co-advisor of Mr. Josep Torres Oliver’s **Master Thesis**.
“Design and characterization of a small animal PET scanner using Monte-Carlo simulations.”

BACHELOR THESIS

- 2017. Co-advisor of Mr. Raphel Silveira’s **Bachelor Degree Thesis**.
“Determination of the probability distributions associated to the energy weighted interaction position in monolithic crystals”.

OTHER

- 2018. Advisor of Mr. Daniel López Aires **2018 Summer Student** (11 days).
“Image Reconstruction Techniques”.

- 2017. Advisor of Mr. Jorge Roser’s **collaboration grant** (four months).
“*Image Reconstruction algorithms applied to a Compton Telescope*”.
- 2015. Co-advisor of Mr. Ferran Bou’s **research stay** (three weeks). (6 ECTS)
“*Analytical computation of the sensitivity image for a two-plane Compton Telescope*”.

Scientific coordination of singular equipementes and facilities

- 2015-2017 Coordinator of the micro PET/CT Service of the University of Valencia.
The service is equipped with a pre-clinical PET/CT scanner.

Outreach

- 2023. Participant in radio program “Care and Health” with topic “KBG Syndrome”.
Universidad Autonoma del estado de hidalgo. Mexico.
- 2015. Participant in guided visits for colleges.
- 2014. Participant of “**EXPOCIENCIA 2014**” held at IFIC, Valencia May 24th.
- 2014. Participant in guided visits for colleges.
- 2013. Participant of “**EXPOCIENCIA 2013**” held at IFIC, Valencia May 25th.
- 2013. Participant in guided visits for colleges.
- 2012. Participant of “**EXPOCIENCIA 2012**” held at IFIC, Valencia May 19th.
- 2012. Participant in guided visits for colleges.
- 2011. Participant of “**EXPOCIENCIA 2011**” held at IFIC, Valencia Jun 30th.
- 2011. Participant in guided visits for colleges.
- 2010. Participant of “**EXPOCIENCIA 2010**” held at IFIC, Valencia May 30th.
- 2010. Participant in guided visits for colleges.

Awards

- 2023 The Ph.D. Thesis “*Improving Image Quality in a multi-plane Compton Telescope for Hadron Therapy Monitoring*” co-directed by jfo received the prize “Prize of the Real Spanish Society of Physics (RSEF) to the best Ph.D. Thesis in the applied Physics”.
- 2016 The work of the AXPET coll. (jfo is member) was selected by the digital version of “The Guardian” in its section “Science. Life and physics” to illustrate *the impact of research in physics on our lives*⁴.
- 2014. Selected for the “**Meeting with Nobel prizes**” held on the occasion of the meetings of the Jaume I prizes held in Valencia.
- 2011. Collaborator in the IEEE 2011 Conference “**Appreciation Certificate**”.

⁴<https://www.theguardian.com/science/life-and-physics/2016/feb/27/seeing-mice-improvements-in-particle-detectors-and-medical-imaging>

- 1999. Awarded by the University of Valencia with the “**Extraordinary prize to the best records in Physics**”.
- 1999. Awarded with the “**Rotary -Luís Vives**” prize given by the Rotary organization “in recognition of the academic merits”.
- 1994. Selected in the “**V Spanish Olympics of Physics**” to represent Spain in the “**XXV International Olympics of Physics**” held in Beijing (**China**).

Languages

- **Spanish and catalan:** Mother tongues.
- **English:** High level.
Degree: B2 “Certificate of the Spanish Official School of Languages”.
- **French:** Normal level.
Degree: “Certificate of the Brussels University Official School of Languages”.
- **German:** Normal level.
Degree: B1 “Certificate of the Spanish Official School of Languages”.
- **Valencian:** High level.
Degree: C2 “Grau Superior de Coneixements del Valencià’ issued by JQCV.

Computing

- **O.S. :** Windows, Unix/Linux.
- **Programming languages :** Modern C++(C++11,C++17,C++20), CUDA, FORTRAN, python, Java, bash, perl (scripts).
- **Programming skills :** Design patterns, Versioning, Unit/Integration/regression testing, Profiling and Concurrency.
- **Programs for software development :** git, Visual Studio Code, Microsoft Visual Studio Code, bitlocker, JIRA, Confluence, SourceTree, googletest, googlemock, google benchmark, SQL.
- **Other related applications :** GATE, Geant4, amide, valgrind, CUDA, GRID, Mathematica, Root, gsl, Apache.

Summary

Category	Quantity
Research Experience	25 years
Officially recognised research Triennia	3
Postdoctoral grants/contracts	6 (3 public calls)
Participation in research R&D projects	25
European Projects	3
National Projects	21
Private entities Projects	1
Publications (WoS)	86
Articles (JCR)	43 (8 first author; 4 last author/supervisor)
Total cites (WoS)	1423
Publications in Q1 (SJR / JCR)	42/ 31
Index h (WoS)	17
+500	1
+100	2
Book chapters	1
Conference Records	54
Congress contributions	138
Oral presentations	63 (10 first author; 8 invited; 2 last author/superv.)
Poster presentations	75 (8 first author; 3 last author/supervisor)
Thesis (in course)	11(0)
Ph. D. Thesis directed	4(0)
Master Thesis directed	7(1)
Bachelor Thesis directed	1(0)
Other	3(0)
Seminars	8
Big equipments used	1 (pre-clinical PET/CT)
Big equipments managed	1 (pre-clinical PET/CT)
Stays (more than 4 weeks)	5(3)
Scientific coordination	5
Organizing committees	12
Scientific advisory committees	3
Assessment and review of R&D projects	2
Reviewer of Scientific Journals	8 journals
Reviewer of Scientific R&D projects	1
Academic courses given	33 (≈ 442h)
Congress courses given	2
Training courses attended	19
Directly related with Medical Image	11
Project management and coordination	2
AVAP quality level	Prof. Contratado Doctor, PCD
ANECA quality level	Prof. Contratado Doctor, PCD
Agencia Estatal Investigacion quality level	R3 / I3 (Area: FIS/FPN 3)
Radiative Facilities Supervisor	Cons. Seg. Nucl. (CSN)
Animal Handler	Categories: (A+B) and C
Outreach actions	11
Awards	7