

RESOLUTION of 20 of june of 2025, of the Universitat de València, announcing the public offer of employment for different positions within this organisation with employment contracts under several lines of research.

The Rectorate of the Universitat de València, making use of the powers granted by article 50, in relation to article 3.2 of Organic Law 2/2023, of March 22, on the University System, resolves:

To open a call for the public offer of employment for several positions within this organisation with employment contracts in charge of several lines of research, as listed in the annexes of this resolution, in accordance with the following requirements:

#### One. General rules

- 1.1. The purpose of this offers is the selection of staff to fill several positions for several lines of research through the competition system.
- 1.2. In accordance with the provisions of Article 89 of Organic Law 2/2023, of 22 March, on the University System, this selection process must be carried out in accordance with the provisions of the aforementioned law and its implementing regulations.

The specific university regulations included in the Organic Law of the University System, the Law of Science and the Statutes of the Universitat de València, as well as in the regulations of this call, will also apply.

- 1.3. The selection processes for each call will be carried out through a competition that will consist of the evaluation of merits and an interview.
- 1.4. The allocation of positions to applicants who pass these selection processes will be carried out according to the order of points obtained, provided that they meet the requirements for each job position in the annex.
- 1.5. This call will be published in the Diari Oficial de la Generalitat Valenciana (DOGV), on the official notice board https://webges.uv.es/uvTaeWeb/CambiarLenguajeDoAction.do?idioma=en&servicioNavegaci on=-1&grupoNavegacion=-1 of the Universitat de València and on the website of the Human Resources Service (PAS), PAS Research Section, https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/calls/introduction-1285931138641.html.

Publication in the DOGV will be taken as a reference for the purposes of calculating the deadlines for the submission of applications.

The other publications that derive from the events that form the selection process will be published on the official notice board and on the website of the Human Resources Service (PAS), PAS research section.

# Two. General requirements for applicants

Applicants must meet the following requirements to be admitted:

2.1. Be a Spanish national, a national of a member country or be from any of the states in which, by virtue of international treaties established by the European Union and ratified by Spain, free movement of workers applies in the terms by which this legislation is defined in the Treaty of the European Union. In this event, it is necessary to submit proof of having applied for an EU residence card.

Likewise, applicants of nationalities other than those mentioned above may apply and will only need to meet the requirements established in current regulations. Applicants who are



allocated positions offered must provide proof of at least their work and residence permit at the time of hiring.

- 2.2. Be at least 16 years old on the day of the closing date of the application submission period.
- 2.3. Hold one of the academic qualifications that appear in the annex corresponding to the call applied to, or be in a position to obtain the corresponding qualification on the closing date of the application submission period.

In the event that qualifications have been obtained abroad, at the time of hiring, it is necessary to be in possession of documents showing official homologation or declaration of equivalence in Spain, and a photocopy of the same must be attached to the application.

When qualifications have not been officially homologated or declared as equivalent, this requirement may be replaced by proof of having started the process for homologation or declaration of equivalence. The contract will be terminated if the competent academic authority denies homologation, understanding an application to be denied when it is conditioned to the fulfilment of certain requirements which have not been met.

- 2.4. When a language level is required, the Universitat de València Equivalence Table for L2 certification https://www.uv.es/pasinvest/web/escrits-per-a-penjar-en-la-web/Taula-equivalencies-llengues-UV.pdf, approved by the Agreement of the Consell de Govern de la Universitat de València of July 10, 2018 (ACGUV 156/2018) will be used for its evaluation. Language courses will not be evaluated, only the levels attained.
- 2.5. Not suffer from illness or be affected by physical or mental limitations that are incompatible with the exercise of the relevant duties.
- 2.6. Not be suspended from exercising public functions, or have been dismissed from any administrative or public position through disciplinary proceedings. Applicants who are not Spanish nationals must also prove that they are not subject to any disciplinary action or criminal conviction that prevents them from accessing the civil service. Failing this, a copy of an application for issuance must be provided, without prejudice to the sworn statement of the interested persons.

All these requirements must be met at the end of the application submission period and maintained during the selection process.

Applicants are responsible for the veracity of all the information stated in their application and the documentation provided, and may be liable in the event of falsehood, without prejudice to their exclusion from the selection process where relevant.

# Three. Applications

3.1. Interested persons must meet the requirements indicated in the annex corresponding to the call applied to. Applicants must submit their applications, together with their CVs and documents showing their alleged merits through the electronic application form that the Universitat de València will make available to them and for which the link (URL) will be published on the Human Resources Service (PAS), PAS Research Section website https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/calls/introduction-1285931138641.html, from the day when this resolution is published in the DOGV.

To complete the application form, the Universitat de València has made a guide available to interested persons that can be accessed at the following guide: https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/-guide-fill-application-form/application-guidelines-1286178596863.html.

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Those who have any difficulties carrying out the electronic procedure can access the Universitat de València ICT support tool via the following link: https://www.uv.es/virtual-office/en/incidencies-i-comunicacions/incidencies-i-comunicacions.html. For any other questions about the details of this call, please contact the team at the Human Resources Service (PAS), PAS Research Section, through the following link: https://tiqueting.uv.es/create-

ticket?goto=form&organization=30&department=48&team=327&ticket\_type=439&type=b oth.

3.2. The application submission period will close 10 business days from the next business day following the publication of this resolution in the Diari Oficial de la Generalitat Valenciana (DOGV).

Four. Documentation to be attached electronically

Several documents must be attached to the electronic form, preferably in PDF format. The said documentation must be inserted in the tabs and space allocated to it. As follows:

4.1. The PDF document of academic certificates or the receipt of issuance fees must be inserted in the fourth tab. In the case of foreign certificates, it will be necessary to show proof of the relevant recognition or equivalence, or have initiated procedures for the same.

Other PDF documents that show any other requirements necessary for the call must also be inserted in this tab.

- 4.2. The PDF document of the National Identity Document (DNI), Passport or Foreigners' Identification Number (NIE) must be inserted in the fifth tab. These last two documents are only required if the applicant is not a Spanish national.
- 4.3. The CV must also be inserted in the fifth tab as a PDF document or ZIP, through the moat the set out at the following link: https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/-guide-fill-application-form/sample-curriculum-vitae-

1286178597054.html

It will not be necessary for the attached documents to be duly certified at this point in the procedure. A sworn statement made by the interested person on the authenticity of everything stated in the application and the attached documents will be sufficient, without prejudice to the fact that the committee or Universitat de València may require applicants to prove the veracity of the circumstances and documents provided, and evaluated, at any time.

Five. Selection system

5.1. The selection process will be composed of a competition consisting of the evaluation committee's assessment of the applicants' curricular merits, and, where appropriate, conducting an interview.

Merits will be evaluated in accordance with the scale that appears in the annex corresponding to the call applied to. Merits for which proof has not been provided within the application submission period will not be taken into account for the resolution of the competition.

- 5.2. The committee may, if deemed appropriate, conduct an interview with the applicants. The number of applicants who continue to the interview phase will be determined by the criteria of the evaluation committee.
- 5.3. Once the selection process has ended, the applicants' scores will be published and proposals for hiring will be carried out through the Universitat de València official notice



#### board

https://webges.uv.es/uvTaeWeb/CambiarLenguajeDoAction.do?idioma=en&servicioNavegacion=-1&grupoNavegacion=-1 and on the website. https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/calls/introduction-1285931138641.html

- 5.4. The allocation of positions called will be carried out by resolution of the management, and will also be published on the notice board and the website mentioned in point 5.3. of this regulation.
- 5.5. The evaluation committee may declare the selection procedure void in the event that, after evaluating the merits and, where appropriate, conducting interviews, the profiles of the candidates with the best scores do not fully meet the profile of the position and the needs of the research line.
- 5.6. The job pools that derive from these selection processes will remain in force for the duration of the research line for which the calls were opened. Calls to applicants will be made according to the order of the pool.

### Six. Evaluation Committee

- 6.1. The evaluation committee is that which appears in the annex corresponding to each call.
- 6.2. The provisions of the Agreement of the Consell de Govern de la Universitat de València (ACGUV/303/2021) which approves the roadmap on public integrity measures, prevention and fight against fraud, corruption and conflicts of interest will apply to the members of this committee.

To this end, they must complete the relevant declaration of absence of conflict of interest (DACI), which will be attached to the committee's constitution certificate, and form part of the administrative file. There will be a moat the standardised by the Universitat de València on the following website: https://www.uv.es/uvweb/administrative-service-staff/en/research-staff/internal-management-recruitment/dacis-1286158520581.html

- 6.3. The committee will clarify all questions that may arise in the application of these rules and everything that must be done in unforeseen cases.
- 6.4. The committee's procedure for action will meet the provisions of Law 40/2015, of 1 October, on the Legal Regime of the Public Sector at all times.
- 6.5. For communication and any problems that may arise, the evaluation committee's office will be located in the place indicated in the annex corresponding to the call applied to.

# Seven. Hiring

- 7.1. Once the selection processes of this call have been completed, the contracts will be executed in writing and the most appropriate contractual arrangements from those in force at the time of this execution will be used for the purpose of the same.
- 7.2. The start date will be set out in the proposed contract, depending on the needs of the line of research and provided that it is administratively feasible.
- 7.3. Contracts may be terminated for any of the causes provided for in the Workers' Statute or in other applicable legislation, in addition to those stated in the contract itself. Among these, the following will be established:
  - 7.3.1. Completion or exhaustion of the budget allocation.
  - 7.3.2. Completion of the tasks assigned to the employee's position within the project.
  - 7.3.3. Completion of the project.



# Eight. Information on collected data

8.1. The Universitat de València is the entity responsible for the data provided by applicants for this selection process. The information received will be exclusively processed for the purposes of the call in addition to subsequent staff management, where appropriate, in accordance with the provisions of existing data protection regulations.

Part of the data may be published on the Official Notice Board of the Universitat de València and on the website of the Research Management Section. In addition, data will also be transferred to the members of the evaluation committee for the assessment of merits and, where relevant, to resolve any complaints made.

8.2. Those who wish to access the selection process file and consult the data of other applicants must previously request access from the Evaluation Committee or Human Resources Service (PAS), PAS Research Section.

In the abovementioned request they commit to keeping the duty of confidentiality of the data and using the appropriate discretion, only being able to use the data for the purpose of raising a possible complaint or allegation.

The use or disclosure of this data other than in the cases mentioned above may imply liability in accordance with current legislation.

8.3. For more information on data processing, please consult the following link:. https://www.uv.es/pasinvest/web/escrits-per-a-penjar-en-la-web/guia-presentacio-solicit/Proteccio-Datos-UV-cast.pdf

# Nine. Language clause

The full text of this resolution and annexes have been written in English, Valencian and Spanish. All three versions are official; however, the Spanish version is to be used in case of discrepancy.

# Ten. Appeals

An optional appeal for reconsideration may be filed against this resolution, which exhausts administrative remedies, before the same body that issued the resolution within a period of one month from the day following its notification or publication. A contentious-administrative appeal may be filed before the bodies of the contentious-administrative jurisdiction of the Community of Valencia within a period of two months from the day following its notification.

The appeal provided for in Law 39/2015, of 1 October, of the Common Administrative Procedure of Public Administrations may be filed against the actions of the evaluation committee.

Likewise, the administration, if appropriate, may review the resolutions of the court in accordance with the aforementioned regulation.

Valencia, 20 of june of 2025. The rector, by delegation (DOGV 30/05/2022), the Manager: Juan Vicente Climent Espí.



# ANNEX I

Project: «MRR/P3: Proceso de deposición de semiconductores en capa fina por transporte de vapor e integración en dispositivos (PROSEM). CPI-25-303». co-financed by the Ministry for Digital Transformation and the Public Service, Recovery, Transformation and Resilience Plan of the European Union, "European Union - NextGenerationEU", in charge of the research line: «Thin film semiconductor deposition».

Public offer of employment for a senior PhD researcher position.

- 1. General conditions of the position offered
- 1.1. Job title and classification:

Senior PhD researcher.

Group: A.

- 1.2. Working hours: 37 hours per week.
- 1.3. Provision of the grant: the purpose of this grant will be to fund the salary, among other items. The monthly gross salary, full-time, will be 3,146.55 (12 payments).
  - 1.4. Functions and tasks to be carried out:
- Preparation of thin layers of perovskite using evaporation processes, characterization to monitor their stability and relate it to material defects.
  - 1.5. Purpose and duration: preparation of perovskites by vacuum evaporation processes.

The contract will be determined by the duration of the line of research and budgetary availability.

Once the duration of this first project or its budget availability has ended, the person who is awarded the place may join other projects belonging to the same line of funded research.

- 1.6. Requirements
- 1.6.1. Qualifications: PhD.
- 2. Scale
- 2.1. Scientific Production (up to 40 points): thesis supervision, publication of scientific articles, books, book chapters and monographs and presentation of work in scientific meetings will be evaluated according to the Scale for the evaluation of the current Annual Research Report at the time of the publication of the call.
- 2.2. Preferential merits related to the purpose of the contract (up to 20 points): the Tribunal may agree to conduct an interview in order to better specify the evaluation of preferential merits.
  - PhD in Physics.
  - Chemical Engineering.
  - Experience in the theoretical and experimental study of hybrid perovskites.
- Experience in the preparation and characterization of perovskite-based solar cells and in the study of the impact of solar radiation on the materials that make up these cells.
  - Good level of English.
  - 2.3. Participation in competitive research projects (up to 15 points):
- 2.3.1. For each year of certified participation as a full-time team member of research projects in competitive calls of the National R&D Plan or Autonomous Programmes, 3 points will be assigned.



- 2.3.2. For each year of certified participation as a team member of European research projects, 5 points will be assigned.
  - 2.4. Participation in knowledge transfer activities (up to 15 points):
- 2.4.1. For each year of certified participation as a full-time team member of contracts and agreements to carry out research projects, 3 points will be assigned. Services, consulting and training activities are excluded from this scale.
- 2.4.2. For appearing as co-inventor/co-author of patents, utility models or other types of industrial or intellectual property, 5 points will be assigned.
- 2.5. Postdoctoral stays at universities and research centres other than the centre where the doctoral thesis was obtained (up to 10 points):
- 2.5.1. For each certified year of stays at other universities and research centres funded by competitive calls of the European Framework Programme, National R&D Plan or Autonomous Programmes, 5 points will be assigned. The stays must have a minimum duration of 30 consecutive days.
- 2.5.2. For each certified year of stays at other universities and research centres without competitive funding, 2 points will be assigned. The stays must have a minimum duration of 30 consecutive days.

#### 3. Evaluation committee members

President: Eugenio Coronado Miralles, professor at the Departament de Química Inorgànica.

Member 1: Hendrik Jan Bolink, professor at the Departament de Química Inorgànica.

Member 2: Amparo Chafer Ortega, professor at the Departament d'Enginyeria Química.

Member 3: Carlos Jose Gomez Garcia, professor at the Departament de Química Inorgànica.

Secretary: Rosella Cecilia Mello Centonze, professor at the Departament de Química Órgànica.

### 4. Alternate evaluation committee

President: Enrique Orti Guillen, professor at the Departament de Química Física.

Member 1: Michel Sessolo, professor at the Departament de Química Inorgànica.

Member 2: Salvador Garrigues Mateo, professor at the Departament de Química Analítica.

Member 3: Laura Escuder Gilabert, professor at the Departament de Química Analítica.

Secretary: Carmen Molins Legua, professor at the Departament de Química Analítica.

For communication and any problems that may arise, the evaluation committee will be based at the Institut de Ciència Molecular (ICMOL), of the Universitat de València.

# ANNEX II

Project: «Modelos de sabor en teorías deconstruidas. (FLAMENCO). CPI-25-321». cofinanced by the State Research Agency -AEI- and by the Ministry of Science, Innovation and Universities, in charge of the research line: «Física mas allá del modelo estándar: neutrinos, sabor y cosmología de partículas».

Public offer of employment for a senior PhD researcher position.



- 1. General conditions of the position offered
- 1.1. Job title and classification:

Senior PhD researcher.

Group: A.

- 1.2. Working hours: 37 hours per week.
- 1.3. Provision of the grant: the purpose of this grant will be to fund the salary, among other items. The monthly gross salary, full-time, will be 3,146.55 (12 payments).
  - 1.4. Functions and tasks to be carried out:
- Development and study of models that explain the masses and mixing of fermions with non-universal gauge groups.
  - Study of grand unified theories that solve the flavor problem.
- Presentation of results at international conferences and seminars and publication of articles in high-impact journals.
- 1.5. Purpose and duration: development and study of flavor models based on non-universal gauge groups.

The contract will be determined by the duration of the line of research and budgetary availability.

Once the duration of this first project or its budget availability has ended, the person who is awarded the place may join other projects belonging to the same line of funded research.

- 1.6. Requirements
- 1.6.1. Qualifications: PhD.
- 1.6.2. Qualifications: Bachelor/Degree in Physics

### 2. Scale

- 2.1. Scientific Production (up to 40 points): thesis supervision, publication of scientific articles, books, book chapters and monographs and presentation of work in scientific meetings will be evaluated according to the Scale for the evaluation of the current Annual Research Report at the time of the publication of the call.
- 2.2. Preferential merits related to the purpose of the contract (up to 20 points): the Tribunal may agree to conduct an interview in order to better specify the evaluation of preferential merits.
  - PhD in Physics.
  - Knowledge of models with extended gauge groups, including grand unified theories.
  - Research experience in neutrino mass models.
  - 2.3. Participation in competitive research projects (up to 15 points):
- 2.3.1. For each year of certified participation as a full-time team member of research projects in competitive calls of the National R&D Plan or Autonomous Programmes, 3 points will be assigned.
- 2.3.2. For each year of certified participation as a team member of European research projects, 5 points will be assigned.
  - 2.4. Participation in knowledge transfer activities (up to 15 points):
- 2.4.1. For each year of certified participation as a full-time team member of contracts and agreements to carry out research projects, 3 points will be assigned. Services, consulting and training activities are excluded from this scale.
- 2.4.2. For appearing as co-inventor/co-author of patents, utility models or other types of industrial or intellectual property, 5 points will be assigned.



- 2.5. Postdoctoral stays at universities and research centres other than the centre where the doctoral thesis was obtained (up to 10 points):
- 2.5.1. For each certified year of stays at other universities and research centres funded by competitive calls of the European Framework Programme, National R&D Plan or Autonomous Programmes, 5 points will be assigned. The stays must have a minimum duration of 30 consecutive days.
- 2.5.2. For each certified year of stays at other universities and research centres without competitive funding, 2 points will be assigned. The stays must have a minimum duration of 30 consecutive days.
  - 3. Evaluation committee members

President: Nuria Rius Dionis, professor at the Departament de Física Teòrica.

Member 1: Avelino Vicente Montesinos, professor at the Departament de Física Teòrica.

Member 2: Vicente Muñoz Sanjose, professor at the Departament de Física Aplicada i Electromagnetisme.

Member 3: Gabriela Alejandra Barenboim Szuchman, professor at the Departament de Física Teòrica.

Secretary: Isabel Cordero Carrion, professor at the Departament de Matemàtiques.

4. Alternate evaluation committee

President: M Amparo Tortola Baixauli, professor at the Departament de Física Teòrica.

Member 1: Oscar Manuel Vives Garcia, professor at the Departament de Física Teòrica.

Member 2: Francisco Javier Garcia Haro, professor at the Departament de Física de la Terra i Termodinàmica.

Member 3: Susana Planelles Mira, professor at the Departament d'Astronomia i Astrofísica.

Secretary: Maria Jesus Hernandez Lucas, professor at the Departament de Física de la Terra i Termodinàmica.

For communication and any problems that may arise, the evaluation committee will be based at the Institut de Física Corpuscular (IFIC), of the Universitat de València.

#### ANNEX III

Project: «Centro de excelencia "SEVERO OCHOA". CPI-25-359». co-financed by the State Research Agency -AEI- and by the Ministry of Science, Innovation and Universities, in charge of the research line: «Física de partículas, astropartículas, nuclear y sus aplicaciones».

Public offer of employment for a senior PhD researcher position.

- 1. General conditions of the position offered
- 1.1. Job title and classification:

Senior PhD researcher.

Group: A.

1.2. Working hours: 37 hours per week.



- 1.3. Provision of the grant: the purpose of this grant will be to fund the salary, among other items. The monthly gross salary, full-time, will be 3,146.55 (12 payments).
  - 1.4. Functions and tasks to be carried out:
- Development of efficient initialization schemes and digitization techniques for quantum simulations of quantum field theories.
- Development of quantum detection schemes as a method for probing entanglement in high-energy physics experiments.
  - 1.5. Purpose and duration: simulations and quantum detection for quantum field theories.

The contract will be determined by the duration of the line of research and budgetary availability.

Once the duration of this first project or its budget availability has ended, the person who is awarded the place may join other projects belonging to the same line of funded research.

- 1.6. Requirements
- 1.6.1. Qualifications: PhD.
- 1.6.2. Qualifications: Bachelor/Degree in Physics.
- 2. Scale
- 2.1. Scientific Production (up to 40 points): thesis supervision, publication of scientific articles, books, book chapters and monographs and presentation of work in scientific meetings will be evaluated according to the Scale for the evaluation of the current Annual Research Report at the time of the publication of the call.
- 2.2. Preferential merits related to the purpose of the contract (up to 20 points): the Tribunal may agree to conduct an interview in order to better specify the evaluation of preferential merits.
  - PhD in Physics.
- Experience in quantum information science, lattice gauge theory, dark matter phenomenology and detection.
  - 2.3. Participation in competitive research projects (up to 15 points):
- 2.3.1. For each year of certified participation as a full-time team member of research projects in competitive calls of the National R&D Plan or Autonomous Programmes, 3 points will be assigned.
- 2.3.2. For each year of certified participation as a team member of European research projects, 5 points will be assigned.
  - 2.4. Participation in knowledge transfer activities (up to 15 points):
- 2.4.1. For each year of certified participation as a full-time team member of contracts and agreements to carry out research projects, 3 points will be assigned. Services, consulting and training activities are excluded from this scale.
- 2.4.2. For appearing as co-inventor/co-author of patents, utility models or other types of industrial or intellectual property, 5 points will be assigned.
- 2.5. Postdoctoral stays at universities and research centres other than the centre where the doctoral thesis was obtained (up to 10 points):
- 2.5.1. For each certified year of stays at other universities and research centres funded by competitive calls of the European Framework Programme, National R&D Plan or Autonomous Programmes, 5 points will be assigned. The stays must have a minimum duration of 30 consecutive days.



- 2.5.2. For each certified year of stays at other universities and research centres without competitive funding, 2 points will be assigned. The stays must have a minimum duration of 30 consecutive days.
  - 3. Evaluation committee members

President: Nuria Rius Dionis, professor at the Departament Física Teòrica.

Member 1: Veronica Sanz Gonzalez, professor at the Departament de Física Teòrica.

Member 2: Vicente Muñoz SanJose, professor at the Departament de Física Aplicada i Electromagnetisme.

Member 3: Jose Manuel Bordes Villagrasa, professor at the Departament de Física Teòrica.

Secretary: Gabriela Alejandra Barenboim Szuchman, professor at the Departament de Física Teòrica.

4. Alternate evaluation committee

President: Armando Perez Cañellas, professor at the Departament de Física Teòrica.

Member 1: Olga Mena Requejo, researcher del Institut de Física Corpuscular.

Member 2: Francisco Javier Garcia Haro, professor at the Departament de Física de la Terra i Termodinàmica.

Member 3: Jose Antonio Sobrino Rodriguez, professor at the Departament de Física de la Terra i Termodinàmica.

Secretary: Maria Jesus Hernandez Lucas, professor at the Departament de Física de la Terra i Termodinàmica.

For communication and any problems that may arise, the evaluation committee will be based at the Institut de Física Corpuscular (IFIC), of the Universitat de València.

# ANNEX IV

Project: «Centro de excelencia "SEVERO OCHOA". CPI-25-361». co-financed by the State Research Agency -AEI- and by the Ministry of Science, Innovation and Universities, in charge of the research line: «Física de partículas, astropartículas, nuclear y sus aplicaciones».

Public offer of employment for a senior PhD researcher position.

- 1. General conditions of the position offered
- 1.1. Job title and classification:

Senior PhD researcher.

Group: A.

- 1.2. Working hours: 37 hours per week.
- 1.3. Provision of the grant: the purpose of this grant will be to fund the salary, among other items. The monthly gross salary, full-time, will be 3,146.55 (12 payments).
  - 1.4. Functions and tasks to be carried out:
  - Investigate flavor instability mechanisms in astrophysics.
- Determine whether these mechanisms are applicable or excluded in the context of the early Universe.



- Analyze the evolution of sterile neutrino species in a 3+1 model.
- Include the effects of leptonic asymmetries in this model.
- Evaluate the consequences for the thermal and dynamical history of the early Universe.
- Explore cosmological constraints and signals on neutrino physics beyond the Standard Model (BSM).
- Identify which cosmological observations may provide insights into new neutrino properties or interactions.
  - Evaluate how these observations constrain or support specific BSM scenarios.
  - 1.5. Purpose and duration: exploring neutrino physics with the early Universe.

The contract will be determined by the duration of the line of research and budgetary availability.

Once the duration of this first project or its budget availability has ended, the person who is awarded the place may join other projects belonging to the same line of funded research.

- 1.6. Requirements
- 1.6.1. Qualifications: PhD.
- 1.6.2. Qualifications: Bachelor in Physics

### 2. Scale

- 2.1. Scientific Production (up to 40 points): thesis supervision, publication of scientific articles, books, book chapters and monographs and presentation of work in scientific meetings will be evaluated according to the Scale for the evaluation of the current Annual Research Report at the time of the publication of the call.
- 2.2. Preferential merits related to the purpose of the contract (up to 20 points): the Tribunal may agree to conduct an interview in order to better specify the evaluation of preferential merits.
  - PhD in Physics.
  - Experience in the phenomenological study of the early Universe.
  - Knowledge of the formation of primordial abundances in primordial nucleosynthesis.
  - Proficiency in PRIMAT and Cobaya software.
  - 2.3. Participation in competitive research projects (up to 15 points):
- 2.3.1. For each year of certified participation as a full-time team member of research projects in competitive calls of the National R&D Plan or Autonomous Programmes, 3 points will be assigned.
- 2.3.2. For each year of certified participation as a team member of European research projects, 5 points will be assigned.
  - 2.4. Participation in knowledge transfer activities (up to 15 points):
- 2.4.1. For each year of certified participation as a full-time team member of contracts and agreements to carry out research projects, 3 points will be assigned. Services, consulting and training activities are excluded from this scale.
- 2.4.2. For appearing as co-inventor/co-author of patents, utility models or other types of industrial or intellectual property, 5 points will be assigned.
- 2.5. Postdoctoral stays at universities and research centres other than the centre where the doctoral thesis was obtained (up to 10 points):
- 2.5.1. For each certified year of stays at other universities and research centres funded by competitive calls of the European Framework Programme, National R&D Plan or Autonomous Programmes, 5 points will be assigned. The stays must have a minimum duration of 30 consecutive days.



2.5.2. For each certified year of stays at other universities and research centres without competitive funding, 2 points will be assigned. The stays must have a minimum duration of 30 consecutive days.

# 3. Evaluation committee members

President: Nuria Rius Dionis, professor at the Departament de Física Teòrica.

Member 1: Veronica Sanz Gonzalez, professor at the Departament de Física Teòrica.

Member 2: Vicente Muñoz SanJose, professor at the Departament de Física Aplicada i Electromagnetisme.

Member 3: Jose Manuel Bordes Villagrasa, professor at the Departament de Física Teòrica.

Secretary: Gabriela Alejandra Barenboim Szuchman, professor at the Departament de Física Teòrica.

### 4. Alternate evaluation committee

President: Olga Mena Requejo, researchaer at the del Institut de Física Corpuscular.

Member 1: M Amparo Tortola Baixauli, professor at the Departament de Física Teòrica.

Member 2: Francisco Javier Garcia Haro, professor at the Departament de Física de la Terra i Termodinàmica.

Member 3: Jose Antonio Sobrino Rodriguez, professor at the Departament de Física de la Terra i Termodinàmica.

Secretary: Alejandro Cerviño Exposito, professor at the Departament d'Òptica i Optometria i Ciències de la Visió.

For communication and any problems that may arise, the evaluation committee will be based at the Institut de Física Corpuscular (IFIC), of the Universitat de València.