

6th INTERNATIONAL RESEARCH AWARD ON TRANSPORTATION INFRASTRUCTURE MANAGEMENT (Research works presented during 2016)

Summary of the Jury's meeting

The meeting took place at Abertis Headquarters on May 16th, 2017, under the presidency of Mr. Salvador Alemany (Abertis president) and Mr. Sergi Loughney (secretary of the Jury).

Prof. Francesc Robusté presented all the candidates (winners of the national editions) together with the tables of the independent rankings by each director of the Abertis Chairs International network. The Jury considered the rankings provided by the Chairs Directors, deleting the vote to the own country's candidates. The Jury started a debate about the qualities of the works, workload, practical issues, innovation, scientific rigor, data analysis and its treatment, the results of the application, and the output of scientific papers (in the case of PhD candidates). Taking into consideration all the above mentioned information the Jury decided by unanimity to assign the following awards:

Winners of the 6th International Award in the **PhD thesis** category (Ex-aequo):

- Dr. **Gabriel Michau** (FR), "*Link Dependent O-D Matrix Estimation*" (Ex-aequo).
- Dr. **Pierre Antoine Laharotte** (FR), "*Prediction of traffic states with machine learning*" (Ex-aequo).

Finalist of the 6th International Award in the PhD thesis category:

- Dr. **Hugo Badia** (ES), "*Bus network structures and urban dispersion*".

Winner of the 6th International Award in the **Master's thesis** category:

- Mr. **Markus Niehaus** (CH), "*Accessibility and equity in social appraisal*".

Finalists of the 6th International Award in the Master's thesis category:

- Ms. **Marie-Juliette Barthes** (FR), "*Dynamic regulation of speeds in A22*".
- Mr. **Víctor Casado** (ES), "*Simulation of public e-bike sharing system*".

Winner of the 6th International Award in the **Road Safety** category:

- Dr. **Hedí Hamdane** (FR), "*Improvement of pedestrian safety*".

Finalists of the 6th International Award in the **Road Safety** category:

- Dr. **Jordi Cañas** (ES), "*Design of an in-situ continuous concrete NJ barrier*".
- Mr. **Fábio Vieira** (BR) "*Driver's behavior under mental workload*".

Salvador Alemany
President Abertis

Francesc Robusté
Representative of the Directors
of the Abertis Chairs (*)

Sergi Loughney
Secretary Jury

(*) Directors of the Abertis Chairs (2017): Prof. Francesc Robusté (Spain), Prof. Simon Cohen (France), Prof. Benjamin Colucci (Puerto Rico), Prof. Juan de Dios Ortúzar (Chile), Prof. Liedi Bernucci (Brasil).

ANNEX:

May 12, 2017

INTERNATIONAL ABERTIS AWARD 2016

Ranking proposed by International JURY

(1=Best, 6=Worst; rank all the national Prizes trying to avoid tied-ups)

PhD theses:

ES	FR	PR	CH	BR
6	5	4	6	5
1	3	5	2	1
4	4	6	5	4
5	6	2	4	6
2	1	3	3	3
3	2	1	1	2
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Candidate (National Prize)

	<i>Shear strength and displacement capacity of squat reinforced concrete shear walls.</i> Dr. Carlos Adorno
	<i>Comparison of bus network structures versus urban dispersion: a monocentric analytical approach. Evidences from Barcelona's bus network.</i> Dr. Hugo Badia
	<i>Crescimento econômico e infra-estrutura: o impacto do processo em Minas Gerais.</i> Dr. Lucas Castro
	<i>Desenvolvimento e validação de função de transferência para previsão do dano por fadiga em pavimentos asfálticos.</i> Dr. Marcos Fritzen
	<i>Contributions to the short-term, multi-variate and multi-scale prediction of traffic states based on machine learning methods.</i> Dr. Pierre Antoine Laharotte
	<i>Link Dependent Origin-Destination Matrix Estimation: Nonsmooth Convex Optimisation with Bluetooth-Inferred Trajectories.</i> Dr. Gabriel Michau
	Prize not awarded this year – declared void

Master and graduating theses:

	ES	FR	PR	CH	BR
1	5	4	5	1	
2	1	6	2	4	
6	6	2	6	6	
5	3	3	2	3	
4	2	1	1	2	
3	4	5	2	5	

Candidate (National Prize)

	<i>Etude a priori de la régulation dynamique des vitesses appliquée au cas de l'A22.</i> Marie-Juliette Barthes
	<i>Simulation of a public e-bike sharing system.</i> Victor Casado
	<i>A numerical evaluation of equivalent-linear site response analyses.</i> Margarita Chi
	<i>The role of information in transit use by undergraduate and graduate students in Brazil and Denmark.</i> Mayara Monteiro
	<i>Accesibilidad y equidad: herramientas para ampliar la evaluación social de proyectos de transporte.</i> Markus Niehaus
	<i>Efectos de expansión de capacidad vial en congestión y su interacción con otras políticas urbanas.</i> Tomás Riquelme

Road safety

	ES	FR	PR	CH	BR
2	1	2	4	3	
3	5	4	3	4	
5	3	3	5	5	
1	2	1	1	1	
4	4	5	2	2	

Candidate (National Prize)

	<i>Diseño de una nueva barrera continua de hormigón in situ.</i> Dr. Jordi Cañas
	<i>Proposición de Modelos de Probabilidad de Ocurrencia de Rollover Utilizando Teoría de la Confiabilidad.</i> Nicolás Cruz
	<i>Mejoras en las medidas para la seguridad de las zonas escolares en el área oeste de Puerto Ricom.</i> Joangelli González
	<i>Improvement of Pedestrian Safety: Response of detection systems to real accident scenarios.</i> Hedi Hamdane
	<i>Evaluation of drivers' behavior performing a curve under mental workload.</i> Fábio Vieira