E. Veronica Belmega

Associate Professor (*Maître de Conférences, HDR*) at ENSEA Deputy Director of ETIS laboratory

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France

Date of Birth 22nd May 1983 Webpage sites.google.com/site/evbelmega

Nationalities Romanian and French Civil Status Married, one child

Research Interests

Themes: online optimization, machine learning and game theory applied to energy-efficient communications, IoT networks, MIMO systems, wireless communications, physical layer security, electrical power grids, ...

Main contributions: optimal transmit (precoding) strategies maximizing the energy efficiency in MIMO systems, low-feedback online and efficient algorithms coping with arbitrary network dynamics and mobility (IoT networks)

Professional Experience

Sep 2011 - Associate Professor (Maître de Conferénces) - ENSEA,

Present Electrical engineering graduate school, Cergy-Pontoise, France

Research: ETIS, UMR 8051, CY Cergy Paris Université, ENSEA, CNRS **Teaching**: Computer Science Dept. and Signal Processing Dept.

Sep 2015 - Visiting Researcher (Délégation complète) - Inria, Grenoble Rhône-Alpes, France

Aug 2017 Collaborator: Panayotis Mertikopoulos

Oct 2010 - Post-doctoral Researcher - Princeton University, NJ, USA, and Supélec, Gif-sur-Yvette, France

Aug 2011 Collaborators: Vincent H. Poor, Lalitha Sankar, Walid Saad, Mérouane Debbah

Sep 2007 - Teaching Assistant (Monitrice) - École Polytechnique, Palaiseau, France

Aug 2010 Teaching: Physics Dept.

Education and Degrees

Mar 2019 HDR (Habilitation to Direct Research) - Université de Cergy-Pontoise, France

"Contributions to energy-efficient wireless communications exploiting games, online optimization and learning"

2007-2010 PhD in Telecommunications - Université Paris-Sud 11, Orsay, France

"On resource allocation problems in distributed MIMO wireless channels" **Research:** L2S, UMR 8506, CNRS, CentraleSupélec, Université Paris-Saclay

Advisors: Samson Lasaulce, Mérouane Debbah

2006-2007 MSc in Signal Processing and Communications - Université Paris-Sud 11, Orsay, France

Rank: 1/13, Mention TB - Trés Bien

2005-2006 International Socrates/Erasmus Exchange Program - École Polytechniques, Palaiseau, France

Track: Applied Mathematics (3rd year, French engineer cycle)

2002-2007 Engineer Diploma in Automatic Control and Computer Science - Politehnica University of Bucharest, Romania

Rank: 6/210

Awards and Distinctions

2021 Prix CY Alliance: Women and Science award

2020 IEEE Senior Member

2020 PR certification (qualification)- CNU 61

2018 Doctoral Supervision and Research Bonus (PEDR) - French National Council of Universities (CNU 61)

2017 Top Editors - Transactions on Emerging Telecommunications Technologies (ETT)

2015 Fellowship for Mobility (*Délégation*) - Inria, France

2012 Associate Research Scholar Fellowship - Princeton University, NJ, USA

2009 Prix L'Oréal: National Fellowship - L'Oréal France - UNESCO - French Academy of Science

2007 PhD Fellowship - French Ministry of Research and Education

2005 Socrates/Erasmus International Scolarship - École Polytechnique and Politehnica University of Bucharest

Advising

PhDs 3 ongoing (30% and 60% - official director, and 20% - co-advisor), 3 defended (40%, 50%, 75% - co-advisor)

and one starting in the fall 2021

Post-docs 2

Publications

27 (20*) International journal papers, 3 (2*) invited 51 (40*) International conference papers, 13 (6*) invited

4 (1*) Book chapters

6 (3*) National conference papers * Publication of research work post-PhD

Scientific Responsibilities

2020 - ETIS, UMR 8051, CY Cergy Paris University, ENSEA, CNRS

present Deputy Director (Directrice Adjointe)

2019 - International ANR - FAPESP research project: ELIOT - Emerging Technologies in IoT

2023 Principal Investigator (PI)

2016 - Signal-Image-Vision Best PhD prize organized jointly by the French Club EEA, GdR ISIS and GRETSI

2018 *Jury member, Vice-president in 2017 and President in 2018*

Jan. 2013 - GdR ISIS French Network in Image, Signal and Vision funded by the CNRS and French industrial partners

Nov. 2017 *Scientific coordinator (Directrice scientifique adjointe)*

2016 - PhD and Associate Prof. hiring committees

present PhD examiner: 8; PhD reviewer (rapporteure): 4; Associate Prof. hiring committees: 5

Local Responsibilities (ENSEA)

Since 2020 Int. Relations correspondent of the "Radulet" area (Czech Rep., Bulgaria, Romania, Greece, Turkey)

 $\textbf{Since 2019} \quad \text{Head of the Master of Eng. in Computer Science } (\textit{Option IS-Informatique et Systèmes, 3ème ann\'ee})$

2014, 2018 Co-head of the Master of Eng. in Networks and Communications (*Option RT - Réseaux et Télécoms., 3ème année*)

2013-2016 Member of the Scientific Board

Editorial Activities

Jul. 2016 - Transactions on Emerging Telecommunications Technologies (ETT)

Feb. 2020 Executive Editor

Feb. 2017 - IET Signal Processing Oct. 2017 - Associate Editor

Conference Organization and TPCs

2020 Special session: "Recent advances in the applications of game theory and learning to communication networks", **NETGCOOP**, Cargese, Corsica

2017 GdR ISIS meeting: "Game theory, optimization and learning", Paris, France

2014 International workshop: "Wireless Networks, Communication, Cooperation and Competition" (WNC3), WiOpt, Hammamet, Tunisia

2013 Special session: "Communications and Control in the Smart Grid" (CCSG), IEEE BlackSeaCom, Batumi, Georgia

Since 2011 Regular TPC: IEEE confs. ICC, GLOBECOM, WCNC, ICNC, SPAWC, etc.