

## Speakers biographies

### Jean-Claude BELFIORE

*Mathematical and Algorithmic Sciences Lab, Huawei, France*



Jean-Claude Belfiore received the "Diplôme d'ingénieur" (Eng. degree) from Ecole Supérieure d'Electricité (Supelec) in 1985, the "Doctorat" (PhD) from ENST in 1989 and the "Habilitation à diriger des Recherches" (HDR) from Université Pierre et Marie Curie (UPMC) in 2001. From 1989, he was with the "Ecole Nationale Supérieure des Télécommunications, ENST, also called "Télécom ParisTech" as a full Professor in the Communications & Electronics department. In 2015, he joined the Mathematical and Algorithmic Sciences Lab of Huawei as head of the Communication Science Department. Jean-Claude Belfiore has made pioneering contributions on modulation and coding for wireless systems (especially space-time coding) by using tools of number theory. He is also one of the co-inventors of the celebrated Golden Code of the Wi-Max standard. Jean-Claude Belfiore is author or co-author of more than 200 technical papers and communications and has served as advisor for more than 30 Ph.D. students. He was Associate Editor of the IEEE Transactions on Information Theory for Coding Theory and has been the recipient of the 2007 Blondel Medal

### Daniel BENNEQUIN

*Université Paris-Diderot*



Graduate from Ecole Normale Supérieure. PHD in 1982 with Alain Chenciner at Paris VII. Then Professor at Strasbourg University. Today Professor at Paris-Diderot University, and member of the IMJ. During the 1980's he was initiator of contact topology with Y.Eliashberg. During the 1990's, he worked on integrable systems and geometry of Mathematical Physics.

Since 2000 he has been working in Neurosciences (mainly with A.Berthoz, C-d-F, and T.Flash, Weizmann Institute); he made contributions to the study of human movements duration, vestibular information flow and gaze functions during locomotion. His most recent publications are on information topology (with P.Baudot) and psychic pain (with M.Bompard-Porte).

## Olivia CARMELLO

*Università degli Studi dell'Insubria in Como*



Olivia Caramello is a mathematician working as Assistant Professor at the Università degli Studi dell'Insubria in Como.

Her research focuses on investigating the role of Grothendieck toposes as unifying spaces in Mathematics and Logic.

Her main contribution has been the development of methods and techniques for transferring information between distinct mathematical theories by using toposes. After obtaining her Ph.D. in Mathematics at the University of Cambridge, she worked as a post-doctoral researcher at the Centro di Ricerca Matematica Ennio De Giorgi of the Scuola Normale Superiore (Pisa), Jesus College, Cambridge, the Max Planck Institute for Mathematics (Bonn), IHES, and as a Marie Curie Fellow at the Université de Paris VII and the Università degli Studi di Milano. She was awarded a L'Oréal-Unesco fellowship for Women in Science in 2014.

She is the author of the book "Theories, Sites, Toposes: Relating and studying mathematical theories through topos-theoretic 'bridges'" (Oxford University Press, 2017).

## Thierry COQUAND

*Université de Göteborg*



Thierry Coquand is a professor in computer science at the University of Gothenburg, Sweden. He is known for his work in constructive mathematics, especially the calculus of constructions. He received his Ph.D. under the supervision of Gérard Huet. He has been awarded the Kurt Gödel Centenary Research Prize (2008) from the Kurt Gödel Society. Together with S. Awodey (CMU) and V. Voevodsky (IAS) he organised a special year at the IAS (2012/2013) on the Univalent Foundations of Mathematics.