

CV of Michèle Wigger

Associate Professor / Maître de Conférences (HdR)
CNRS, LTCI, Télécom ParisTech, Université Paris-Saclay
michele.wigger@telecom-paristech.fr
<http://perso.telecom-paristech.fr/~wigger>

Research experience :

Maître de Conférences, Telecom ParisTech, Dec. 2009–present.
Visiting Professor, ETH Zurich, July/August 2010, 2013, 2015.
Visiting Professor, Technion–Israel Institute of Technology, June 2011.
Postdoctoral Fellow, University of California, San Diego, May–Nov. 2009.
Postdoctoral Fellow, ETH Zurich, Oct. 2008–March 2009. Budget : 65'000 CHF.

Education/diplomas :

Habilitation (HDR), Université de Paris-EST, July 2015. "Compression, Communication, and Coordination over Networks : Benefits of Side-Information."
Ph.D., ETH Zurich, July 2004–Oct. 2008 : "Cooperation on the Multiple-Access Channel."
M.Sc. Electrical Engineering (with Distinction), ETH Zurich, Oct. 1998–March 2003.

Awards :

ETH Medal for excellent PhD Thesis (top 8% of thesis).
ETH Medal for excellent Master Thesis (top 2.5 % of thesis).
Diploma of Master of Science with Distinction.

Grants and Fellowships :

- *CTO COM* : ERC starting grant, Sep. 2017–Aug. 2022. Budget 1'500'000 Euros. Role : PI.
- *CNet* : Project funded by Huawei's disruptive ICT call, Jan. 2016–June 2017. Budget 200'000 Euros. Role : PI.
- *D2D* : Collaborative project funded by CEFIPRA. Apr. 2015–March 2017. Budget for Telecom Paris-Tech 23'500 Euros. Role : Participant. Role : PI.
- *PINS* : Starting grant "Emergences" by the city of Paris, Oct. 2011–Mar. 2015. Budget : 195'000 Euros. Role : PI.
- Swiss National Science Foundation Fellowship for Prospective Researchers 2009.

Commissions of trust :

- I'm an elected member of the Board of Governors of the IEEE Information Theory Society.
- Since October 2016, I've been an Associate Editor for the IEEE Transactions on Information Theory, and since December 2012, an Associate Editor for the IEEE Communication Letters.
- I've been a TPC member for : *ISIT 2012–2017* (ISIT is the most important conference in our field) ; *ITW 2015, 2017* ; *Int. Zurich Seminar (IZS) 2012–2016* ; *2013 Australian Commun. Th. Workshop* ; *2012 Int. Conf. on Wireless Comm. and Signal Proc.* ; *8th Int. Symp. on Wireless Comm. Systems, 2011* ; *PIMRC 2013–2015*.

Organisation of scientific meetings :

- Publicity chair of *ITW 2016*. ITW is the second most important conference in our field.
- In April 2012, I co-organized (3 organisers) a one-day *GdR ISIS workshop* on "Recent advances in information theory", in Paris, France with ca. 120 attendees.
- *Int. Zurich Seminar (IZS) 2012* : Organizer of a session with 5 invited speakers ; ca. 100 attendees.
- *Int. Symp. on Wireless Com. Syst. 2011* : Co-organizer of a session with 4 invited speakers ; ca. 80 attendees.

Teaching activities :

I teach undergraduate and graduate courses on information theory, coding, and digital communications at Telecom ParisTech. I also teach a course in a Masters programme of University of Paris VI. I've been teaching at ETH Zurich, as a guest lecturer in network information theory.

Supervision :

- Samet Gelincik, PhD student, co-supervised by L. Wang, University of Cergy-Pontoise, Oct. 2016–.
- Pierre Escamilla, PhD student, co-supervised by A. Zaidi, Huawei Technologies, Aug. 2016–.
- Chien-Yi Wang, PostDoc, co-supervised by A. Zaidi, Huawei Technologies, Mar. 2016–Feb. 2017.
- Sadaf Salehkalaibar, PostDoc, Feb.–March 2014. She is now teaching at Tehran University.
- Selma Belhadj Amor, PhD student, Oct. 2011–Mar 2015. She is now a PostDoc at INSA Lyon / National University of Singapore. Thesis title : "Capacity-gains with feedback for multi-user channels".
- Youlong Wu, PhD student, since Nov. 2011–Oct. 2014. He is now a PostDoc at TU Munich. Starting in Jan. 2017 he will be a tenure-track assistant professor at Shanghai Tech. Thesis title : "New ways of exploiting feedback in memoryless broadcast channels".
- Roy Timo, PostDoc, Nov. 2013–Apr. 2014. He is now a researcher with Ericsson in Stockholm.
- Thomas Laich, Master student, May–Nov. 2012. Master thesis title : "The Kaspi/Heegard-Berger problem with an informed encoder."
- Andreas Malär, Master student, co-supervised by A. Lapidoth, July–Dec. 2010. Master thesis : "Source coding with reconstruction constraints."

Publications :

I have published a book chapter and 15 journal articles : 14 of these articles are in the domain's most renowned journal, the IEEE Transactions on Information Theory ; 5 are with students or PostDocs for whom I was the main supervisor. I have further published 42 conference papers in peer-reviewed conferences : 14 of these papers were invited.

Invited Presentations :

I was invited to give the following plenary presentations at conferences :

- Keynote at GlobalSIP 2015, as part of the Symposium on Software-Defined Ecosystems, and Green Computing, Dec. 2015.
- Invited plenary talk Iran Workshop on Communication and Information Theory, May 2016.

I gave the following presentations as part of invited sessions at conferences :

- 2010 Allerton Conference, Monticello (IL), USA.
- 2015 ISWCS, Bruxelles, Belgium and 2011 ISWCS, Aachen, Germany.
- 2011 ITA Workshop and 2012 ITA Workshop in San Diego, USA. (All papers invited.)
- 2015 ITW, Jerusalem, Israel, and 2009 ITW, Volos, Greece.
- 2012 IZS, Zurich, Switzerland.
- 2016 SPCOM, Bangalore, India.

I gave 22 talks at top universities and research centers in Europe and the US. A selection :

- Chalmers University of Technology Gothenburg, May 2008, October 2008, May 2013
- INSA Lyon, Sep. 2015
- ENSEA, University of Cergy Pontoise, Dec. 2010 and May 2015
- EPF Lausanne, February 2014
- Harvard University, May 2009
- Huawei Algorithmic Research Laboratory, Paris, May 2015
- KTH Stockholm, March 2008, July 2008
- Princeton University, April 2009
- Qualcomm, San Diego, October 2009
- Stanford University : Kailath Colloquium, June 2006, and ISL Colloquium, Nov. 2009
- Technical University Munich, March 2011
- Technion–The Israel Institute of Technology, June 2011
- UC Berkeley : Networking, Communications, and DSP Seminar, Oct. 2007 and Oct. 2009