

CURRICULUM VITAE

FEDERICA FANONI

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POSITIONS

Nov 2019 – Chargée de recherche CNRS at the University of Paris-Est
Créteil Val-de-Marne
Oct 2018 – Oct 2019 Chargée de recherche CNRS at the University of Strasbourg
Oct 2017 – Sep 2018 Postdoc at Heidelberg University
Apr 2017 – Sep 2017 Postdoc at the Max Planck Institute for Mathematics in Bonn
Oct 2016 – Mar 2017 Postdoc at Heidelberg University
Jul 2015 – Sep 2016 SNSF Early Postdoc.Mobility Fellow (postdoc) at the University of Warwick

EDUCATION

Jan 2011-Jul 2015 PhD student in Mathematics at the University of Fribourg,
under the supervision of Prof. Hugo Parlier
Sep 2008-Sep 2010 Master in Mathematics at the University of Milan (summa cum
laude)
Sep 2005-Jul 2008 Bachelor in Mathematics at the University of Milan (summa
cum laude)

RESEARCH INTERESTS

Hyperbolic and topological surfaces of finite and infinite type, Teichmüller and moduli spaces, representations of surface groups

PUBLICATIONS

F. Fanoni, *Isospectral hyperbolic surfaces of infinite genus*, ArXiv preprint (arXiv:2012.07344), 2020

F. Fanoni, T. Ghaswala and A. McLeay, *Homeomorphic subsurfaces and the omnipresent arcs*, ArXiv preprint (arXiv:2003.04750), 2020

S. Hensel, F. Fanoni and N. Vlamis, *Big mapping class groups acting on homology*, to appear in Indiana University Mathematics Journal, 2020+

M. Durham, F. Fanoni and N. Vlamis, *Graphs of curves on infinite-type surfaces with mapping class group actions*, Annales de l'Institut Fourier 68 (2018), no. 6, 2581–2612

F. Fanoni and B. Pozzetti, *Basmajian-type inequalities for maximal representations*, Journal of Differential Geometry 116 (2020), no. 3, 405–458

P. Cahn, F. Fanoni and B. Petri, *Mapping class group orbits of curves with self-intersections*, Israel Journal of Mathematics 223 (2018), no. 1, 53–74

V. Erlandsson and F. Fanoni, *Simplicial embeddings between multicurve graphs*, Michigan Journal of Mathematics 66 (2017), no. 3, 549–567

F. Fanoni and H. Parlier, *Filling sets of curves on punctured surfaces*, New York Journal of Mathematics 22 (2016), 653–666

F. Fanoni and H. Parlier, *Systoles and kissing numbers of finite area hyperbolic surfaces*, Algebraic & Geometric Topology 15 (2015), no. 6, 3409–3433

F. Fanoni, *The maximum injectivity radius of hyperbolic orbifolds*, Geometriae Dedicata 175 (2015), 281–307

LONGER TERM RESEARCH VISITS

- Jan 2015–Jun 2015: CUNY Graduate Center, New York
- Mar 2013: Schrödinger Institute for Mathematics and Physics, Vienna

GRANTS AND AWARDS

- Idex Attractivité (Jun 2019–May 2021)
- SNF Early Postdoc.Mobility (Jul 2015–Dec 2016)
- GEAR Network Graduate Internship (Jan 2015–Jun 2015)
- Best talk Award at the 11th Graduate Colloquium (Sep 9–10, 2013, Fribourg, Switzerland)
- CSWM Continued Education grant (Mar 2013)

TEACHING

Teaching assistant at the University of Fribourg:

- Exercise classes (including correction of weekly exercise sets and exams):
 - *Analysis I* (autumn semester 2014)
 - *Mathematical Methods for Computer Scientists I/II – Discrete Mathematics* (academic year 2013/2014)
 - *Algebra and Geometry I/II* (academic year 2012/2013)
 - *Linear Algebra I/II* (academic year 2011/2012)
- Student seminar *Graph Theory Proseminar* (autumn semester 2011)
- Exercise class: *Geometry of surfaces* (spring semester 2011)

Teacher of a Master course at the University of Heidelberg (*Translation surfaces*, summer semester 2018)

Teaching assistant at the University of Paris-Est Créteil Val-de-Marne (*Mathématiques pour la physique 3*, spring semester 2020)

STUDENT SUPERVISION

Mareike Pfeil, Master student at Heidelberg University (academic year 2016/2017)

OUTREACH

- Presentation and speed meeting at the Journée “Filles et maths/info : une équation lumineuse”, University of Paris-Est Créteil Val-de-Marne (Feb 4, 2020)
- *Speed meeting* at the *Rendez-vous des Jeunes Mathématiciennes*, Strasbourg University (Oct 21–23, 2019)
- Talk at the *Rendez-vous des Jeunes Mathématiciennes*, Strasbourg University (Oct 22–24, 2018)

- Member of the *Upstream Program* at Heidelberg University and co-organizer of a one-day event for Bachelor and Master students (*Upstream Perspectives*, Dec 14, 2016)
- Presentation at the *Littlebrook Science Expo*, Littlebrook Elementary School, Princeton (May 19, 2016)
- Talk at the *5th Annual Women in Math and Computing Day*, CUNY York College (Apr 24, 2015)
- Laboratories for elementary to high school students at the *Centro Matematica* (Interuniversity Research Center for the Communication and Informal Learning of Mathematics) in Milan (Nov 2007-May 2008)

OTHER ACTIVITIES

- Organization of the mini-conference *Geometry Day in Créteil*, at the University of Paris-Est Créteil Val-de-Marne (Jan 20, 2020)
- Organization of the conference *Geometric Analysis meets Geometric Topology* at Heidelberg University (Feb 25-28, 2019)
- Organization of the German chapter conference of the European Women in Mathematics (May 3-4, 2018)
- Organization of the Geometry Seminar at Heidelberg University
- Organization of the Geometry and Topology seminar at the University of Warwick

LANGUAGE SKILLS

- Italian: native speaker
- English and French: fluent
- Dutch and German: basic