Curriculum Vitae

Michelle Bucher-Karlsson

Date of Birth: July 25, 1976
Maiden name: Bucher
Citizenship: Swiss
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Present employment:

From September 2014: Lecturer at the University of Geneva.

Past employment:

Sep. 2010 − Aug. 2014: Assistant professor (SNSF professor) at the University of Geneva, supported by the Swiss National Science Foundation (SNSF). Grant nr PP00P2-128309/1.

Feb. 2010 − Aug. 2010: Ambizione grant recipient at EPFL.

Feb. 2009 − Jan. 2010: Parental leave.

Jan. 2008 − Dec. 2009: *Biträdande Lektor* (tenure track assistant professor) at the Royal Insititute of Technology (KTH), Stockholm.

March 2007 − Dec. 2007: Göran Gustafsson Postdoctoral Fellow at KTH.

Oct. 2006 − Feb. 2007: Between 80% and 100% parental leave.

July 2006 − Sept. 2006: Postdoctoral Fellow at KTH, supported by the SNSF.

Jan. 2006 − June 2006: Postdoctoral Fellow at the Mittag-Leffler Institute, program Algebraic topology, organized by Bjørn Jahren, Kathryn Hess and Bob Oliver.

June 2005 − Dec. 2005: Postdoctoral Fellow at KTH, supported by the SNSF.

Jan. 2005 − May 2005: Postdoctoral Fellow at Yale University, supported by the SNSF.

Oct. 2004 − Dec. 2004: Guest researcher at Westfälische Wilhelms-Universität Münster, Germany.

Parental leave:

A total of 11 months with the 2nd child and 6 months with the 1st child.

Education:

July 2004: Ph.D. defense, Ph.D. in Mathematics issued in fall 2004, ETHZ. Ph.D. advisor: Prof. Marc Burger.

Fall 2000: Immatriculation for a Ph.D. Thesis at ETHZ.

1995-1999: Diploma in mathematics at the University of Geneva. Diploma thesis written under the supervision of Prof. Pierre de la Harpe.

1997-1998: Exchange student in mathematics at Warwick University, England.

1991-1995: High school in Geneva (College Candolle) with diploma type C. Awarded the Marc Birkigt Price (mathematics, descriptive geometry and physics).

Grants and awards:

Type of grant	Institution	Duration	Amount in €
SNSF Professorship	Geneva	4 years	1'440'867
SNSF Ambizione	EPFL	3 years	317'656
Göran Gustafsson award for younger scientists	KTH	interrupted after 7 months	32'761
Assistant professorship from the Swedish Research Council	KTH	4 years interrupted after 2 years	450'355
SNSF advanced researcher	KTH	declined	41'818
Göran Gustafsson Postdoc	KTH	1 year	30'000
SNSF prospective researcher	Yale/KTH	15 months	71'094

Service:

• Referee for several international mathematics journals.
• Coorganizer, together with R. Kellerhals (Fribourg), J. Parker (Durham) of the Borel Seminar "Discrete group actions in geometry and toology", 30 June - 4 July 2014.
• Coorganizer, together with M. Bridson (Oxford), A. Karlsson (KTH-Geneva), T. Nagnibeda-Smirnova (Geneva), K. Vogtmann (Cornell), of the one semester program "Geometric and analytic aspects of group theory" at the Mittag-Leffler Institut, Spring 2012, Jan 16 - May 30.
• Coorganizer, together with E. Falbel (Paris), R. Kellerhals (Fribourg), J. Parker (Durham) of the Borel Seminar "Topics in Real and Complex Hyperbolic Geometry", 22-26 August 2011.
• Participant of an AIM Square program on "New Horizons for Simplicial Volume and the Barycenter Method" with C. Connell (Indiana), J. Lafont (Ohio State), R. Sauer (Regensburg) and B. Schmidt (Michigan State), summer 2011.
• Superviser for the semester project "Cayley graphs and growth of groups" by Nathalie Pellet (exchange student from EPFL), at KTH, fall 2008.
• Superviser for the project "Maths en Jeans" (Mathematics in Jeans) at the French Lycée Saint-Louis of Stockholm, 2008-2009.
• Jan. 2008 - Dec. 2009: Member of the Equality Committee at the school of Enginnering Sciences, KTH.
• Organizer of events for female students at KTH, and for female faculty members at the school of Enginnering Sciences, KTH, Jan. 2008 - Dec. 2009.

Students:

Ph.D. students: Caterina Campagnolo (start May 2011), Hester Pieters (start September 2011)
Master students: Caterina Campagnolo (joint with Tatiana Nagnibeda-Smirnova), April 2011, awarded the Edouard Gans Price for the best master thesis in mathematices in Geneva in 2010-2011; Isadora Hongler, June 2012; Malika Da Riva, May 2014; Arnaud Forestier, June 2014.

Teaching experience:

Undergraduate courses in Geometry and Algebra. Several mini courses on subjects closely related to my research.

Languages:

Fluency in French, English, Swiss-German, German and Swedish.

Publication list

Michelle Bucher-Karlsson

For a complete list of publication, see http://www.unige.ch/math/folks/bucher/Publications.html

Peer reviewed articles, limited to the past 5 years:

• Isometric properties of relative bounded cohomology (with Marc Burger, Roberto Frigerio, Alessandra Iozzi, Cristina Pagliantini and Maria Beatrice Pozzetti), to appear in J. of Topology and Analysis.

• Proportionality principle for the simplicial volume of families of Q-rank 1 locally symmetric spaces (with Inkang Kim and Sungwoon Kim), preprint 2012, Math. Zeitschrift 276 (2014), 153–172.

• Milnor-Wood inequalities for products (with Tsachik Gelander), Algebraic and Geometric Topology 13 (2013), 1733–1742.

• A dual interpretation of the Gromov-Thurston proof of Mostow Rigidity and Volume Rigidity (with Marc Burger and Alessandra Iozzi), Trends in Harmonic Analysis, Indam-Springer Series 3, Springer-Verlag Italia 2013.

• The norm of the Euler class (with Nicolas Monod), Math. Annalen 353 No2 (2012), 523–544.

• The generalized Chern conjecture for manifolds that are locally a product of surfaces (with Tsachik Gelander), Advances in Math. 228 (2011) 1503–1542.

• On minimal triangulations of products of convex polygons. *Discrete and Computational Geometry* Vol. 41, Issue 2 (2009), 328-347.