

Submittee: Bianca Viray
Date Submitted: 2017-09-19 08:25
Title: Women in Numbers 4
Event Type: Conference-Workshop

Location:
Banff International Research Station (BIRS)

Dates:
August 14 - 18, 2017

Topic:
Research collaboration conference for women in number theory: participants worked on research problems in small groups in topics such as analytic number theory, Apollonian circle packings, arithmetic dynamics, Chabauty-Coleman experiments for genus 3 curves, computational aspects of supersingular elliptic curves, mock modular forms, Newton polygons on the Torelli locus, supersingular isogeny graphs and cryptography, and torsion structures on elliptic curves.

Methodology:
We had short introductory lectures on each project in the late afternoon on Monday, Tuesday and Thursday. The days on Monday, Tuesday, Wednesday and Thursday were devoted to project group work. On Friday group members gave presentations on their progress throughout the week. On Tuesday and Wednesday evening we held professional development panels in the lounge.

Scientific Highlights:
Every group made substantial progress on their project during the week and has plans to continue working. We expect that most, if not all, of the groups will have a publication from this project. As with all Women in Numbers (WIN) workshops, there are plans to publish a proceedings volume. Jennifer Balakrishnan, Amanda Folsom, Matilde Lalin, and Michelle Manes will be editing the volume.

Organizers:
Balakrishnan, Jennifer, Department of Mathematics, Boston University
David, Chantal, Department of Mathematics and Statistics, Concordia University
Manes, Michelle, Department of Mathematics, University of Hawaii at Manoa
Viray, Bianca, Department of Mathematics, University of Washington

Speakers:
Damaris Schindler, Mathematics Department, Utrecht University, "Apollonian circle packings"
Holly Krieger, Department of Pure Mathematics and Statistics, University of Cambridge, "Arithmetic

dynamics of rational maps"

Rachel Pries, Department of Mathematics, Colorado State University, "Newton polygons in the Torelli locus, I"

Elena Mantovan, Department of Mathematics, California Institute of Technology, "Newton polygons in the Torelli locus, II"

Abbey Bourdon, Department of Mathematics and Statistics, Wake Forest University, "Torsion structures on elliptic curves"

Kirsten Eisentraeger, Department of Mathematics, Pennsylvania State University, "Computational aspects of supersingular elliptic curves"

Kristin Lauter, Microsoft research, "Supersingular isogeny graphs for use in cryptography"

Chantal David, Department of Mathematics and Statistics, Concordia University, "Analytic number theory"

Amanda Folsom, Department of Mathematics and Statistics, Amherst College, "Mock modular forms"

Jennifer Balakrishnan, Department of Mathematics, Boston University, "Chabauty-Coleman experiments for genus 3 curves"

Links:

<https://goo.gl/photos/ujcg4e5uM7QHdt9L7>

Comments / Miscellaneous:

We did not request any abstracts for talks.
