Submittee: Michael Jacobson, Jr. **Date Submitted:** 2015-08-03 02:06

Title: Explicit Methods for Abelian Varieties: Kick-Off Workshop

Event Type: Conference-Workshop

Location:

University of Calgary

Dates:

May 25-29, 2015

Topic:

- Properties of Galois representations and automorphic representations attached to Abelian varieties
- Prym varieties and intermediate Jacobians
- Constructing varieties with given endomorphism rings, zeta functions and related properties
- Rational points on moduli spaces
- Point counting on varieties over finite fields
- Efficient group arithmetic for Abelian varieties
- Cryptographic applications of Abelian varieties

Methodology:

The workshop featured lectures in the morning and discussion sessions in the afternoon, as well as a science colloquium and reception on Thursday afternoon celebrating the launch of the associated CRG.

Objectives Achieved:

As this was the opening event of our CRG, the main goals were 1) to get everyone together and learn more about what we're all interested in, and 2) publicize the CRG. Both were acheived: participants found the workshop to be interesting and useful, and we had announcements and University news articles published about the CRG, workshop, and public lecture.

Organizers:

Jacobson, Michael, Computer Science, University of Calgary Bauer, Mark, Mathematics and Statistics, University of Calgary

Speakers:

See attached file (PIMS-talks.pdf).

Links:

File Uploads:

Additional Upload 1: http://www.pims.math.ca/files/final_report/PIMS-talks.pdf

Demographics:

Number of Participants: 28

Males: 26 Females: 2 Academics: 28 Professors: 11

Postdoctoral Fellows: 4 Graduate Students: 11 Undergraduate Students: 1

Others: 1

Background Field:

Location:

From Canada: 22

Alberta: 8

British Columbia: 4

Manitoba: 1 Ontario 9

Saskatchewan 1

Other North Americans 2

Others 2

Sponsors:

PIMS - \$20000

University of Calgary VPR office - \$3000

University of Calgary Dept of Computer Science - 3000

University of Calgary Dept of Mathematics and Statistics - \$2000