Canada Research Chair Tier II
Number Theory and Arithmetic Geometry – Grand Challenges and Applications

The University of Calgary is soliciting applications for a **Tier II Canada Research Chair in Mathematics**, in the areas of **number theory and arithmetic geometry**. Subject to approval by the CRC of the candidate selected, the individual will be appointed to a tenure track position at the Assistant or Associate Professor level. The successful applicant will join a highly active, well-connected, cohesive team of number theorists with broad interests. He or she is expected to complement the group's existing research strengths in computational and algorithmic number theory, algebraic and arithmetic geometry, applications to cryptography, and the Langlands program. Specifically, the appointee will work in one or more of the following areas:

- Arithmetic and computational aspects of Shimura and Abelian varieties;
- Lattices, with connections to representation theory and cryptography;
- Computation of automorphic *L*-functions, especially those arising from Abelian varieties.

In alignment with the University of Calgary's *Eyes High* strategic direction, the Chair will actively contribute to research, teaching and curriculum development, and student/postdoc supervision, and is in time expected to grow into a leadership role within the Department and the institution.

The U of C's number theory group is currently leading a collaborative effort, jointly with several world-class research teams throughout Western Canada and the United States, to form a new *Pacific Institute for the Mathematical Sciences* Collaborative Research Group in *Explicit Methods for Abelian Varietie*s, expected to commence in April 2015. Through this initiative, immediate access to funds for postdocs and conferences will be at the Chair's disposal. Further collaborative opportunities are anticipated to arise through the team's close affiliation with the University's *Institute for Security, Privacy and Information Assurance* and its synergies with the *Institute for Quantum Science and Technology*. The nearby *Banff International Research Station for Mathematical Innovation and Discovery*, host to world-class conferences throughout the year, offers access to additional research collaborations and high-profile visitors. Numerous competitive funding opportunities are available from institutional, provincial, regional, and national sources, including URGC, AITF, PIMS, MITACS/MPRIME, and NSERC. Number theory and arithmetic geometry represent significant regional and national areas of expertise whose strength is further leveraged through regular joint video-conferenced seminars and institutional membership in the Pacific Rim Mathematical Association.

Other resources available to the Chair include access to a state-of-the-art video-conferencing facility and to the extensive WestGrid computing resources free of charge. The Department offers partial support for a formal postdoctoral program and provides full fall/winter funding for graduate students, with the expectation that substantial summer funding should come from the Chair or other sources.

This appointment is conditional upon a successful CRC application.

Applications must be submitted electronically through mathjobs.org and consist of

- an AMS standard coversheet
- a curriculum vitae
- a description of past, current and planned future research (up to 4 pages)
- a description of potential synergies with current research conducted at the University of Calgary and of how the applicant plans to advance the development of the U of C number theory group, including evidence of their potential to assume a future leadership role (up to 4 pages)
- Statement of teaching focus and philosophy

Each applicant should also arrange to have three letters of recommendation uploaded to the mathjobs website.

Review of applications will begin on August 15, 2014 and will continue until the position is filled. For additional inquiries, contact search@math.ucalgary.ca .

About the University of Calgary
The University of Calgary is a leading Canadian university located in the nation's most enterprising city. The university has a clear strategic direction to become one of Canada's top five research universities by 2016, where innovative teaching and groundbreaking research go hand in hand, and where we fully engage the communities we both serve and lead. The strategy is called *Eyes High*, inspired by our Gaelic motto, which translates to 'I will lift up my eyes'.

To succeed as one of Canada's top universities, where new ideas are created, tested and applied through first-class teaching and research, the University of Calgary needs more of the best minds in our classrooms and labs. We're increasing our scholarly capacity by investing in people who want to change the world, bringing the best and brightest to Calgary to form a global intellectual hub and achieve advances that matter to everyone.

About Calgary
Named a cultural capital of Canada and one of the best places to live in the world, Calgary is a city of leaders - in business, community, philanthropy and volunteerism. Calgarians benefit from the strongest economy in the nation and enjoy more days of sunshine per year than any other major Canadian city. Calgary is less than an hour's drive from the majestic Rocky Mountains and boasts the most extensive urban pathway and bikeway network in North America.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Calgary respects, appreciates, and encourages diversity.