

*Increasingly, mathematical research institutes play an important role in promoting research. I am very grateful in particular to the Mathematical Sciences Research Institute, to the Institute for Advanced Study, to the Pacific Institute for the Mathematical Sciences, to the Centre de Recherches Mathématiques, to the Fields Institute, to the Mathematisches Forschungsinstitut Oberwolfach, and to the Banff International Research Station for providing the most wonderful working conditions for my collaborators and for me, at various times during my mathematical career. Here is a letter which I sent on July 23, 2011 to Professor Robert Bryant, Director of the Mathematical Sciences Research Institute at Berkeley. This letter briefly describes my first postdoctoral year. This letter is reproduced here with permission and encouragement from Professor Bryant.*

Subject: Postdoctoral year at MSRI / 1986-87

Dear Professor Bryant:

Responding to your request, it is a great pleasure to write to you about my postdoctoral year spent at MSRI during 1986-87.

It is no exaggeration to say that this was a decisive year for my work in Galois theory and quadratic forms. First of all the atmosphere at MSRI was so stimulating: in fact it was electrifying. As I walked through the corridors of MSRI, I was able to see many major mathematicians engaging freely in discussions with other eager mathematicians, and filling notebooks, papers, and blackboards with new ideas. And what breakthroughs came and were expedited at MSRI!

In the now famous seminars of Ken Ribet, the connection between the Taniyama-Shimura Conjecture and Fermat's Last Theorem was explored with all details and fresh explorative spirit; with details being checked, reformulated, improved upon, and invented.

Then suddenly a letter from Francisco Thaine containing some great ideas, came from Brazil to Larry Washington, and prompted Karl Rubin to make further major discoveries about class groups and Tate-Shafarevich groups.

I was also lucky to have been able to participate in Professor Lam's seminar in the Department of Mathematics at UC Berkeley. There in my joint work with Michel Spira we found remarkable small Galois groups encoding some crucial arithmetic information about fields. As it turned out, simultaneously and independently, Fedor Bogomolov was developing his beautiful ideas about Grothendieck's anabelian geometry program and the Bloch-Kato Conjecture, at about this same time. These ideas were further elegantly developed and enriched by Fedor Bogomolov and Yuri Tschinkel, and also Florian Pop made further fascinating progress in this program. Now it is clear that all of these ideas have considerable further potential for arithmetic for fields and besides the results already achieved, these results contain many more secrets about Galois theory and arithmetic algebraic geometry, which still have to be explored and developed more fully.

The wonderful atmosphere, friendship, energy and creativity from the years 1986/87 has remained for me an inspiration for all of my subsequent work in mathematics.

I hope very much that these few personal remarks will be helpful to you.

Thank you, Professor Bryant, and enjoy the rest of your summer!

With all best wishes,

Jan Minac