

EXTRACT FROM OP-SF NET

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This is a report on the conference "Exact Solvability and Symmetry Avatars", held on the occasion of Luc Vinet's 60th birthday, Montréal, Canada, 25-29 August 2014.

During the last week of August, some sixty friends, collaborators, former students and post-docs, and colleagues came together at the Centre de Recherches Mathématiques (CRM) of the Université de Montréal for a late celebration of Luc Vinet's sixtieth birthday (he turned sixty in April 2013). Luc Vinet, by education a theoretical physicist, is well-known in the OPSF community by his many contributions to our field. Of his 162 papers listed in MathSciNet, 75 have primary or secondary MSC number 33. Notably, there are his many papers with Roberto Floreanini in the 90s about interpretations of q -special functions on quantum groups. Of all his papers, the ones that had the most impact are probably the joint papers with Luc Lapointe which settled a weak



form of a conjecture by Macdonald and Stanley about the expansion coefficients of Jack polynomials in terms of symmetrized monomials. Since 2011 there has been a steady flow of papers with Alexei Zhedanov, and more recently also with his PhD student Vincent Genest, about many aspects of the $q=-1$ Askey scheme (originating from the Bannai-Ito algebras). But apart from special

functions, Luc has many other research interests on which he has published: in particular quantum theory and also supersymmetry, integrable systems, combinatorics, quantum information, and many other topics. A constant feature of his publications is that they are in collaboration. One has to go back to the eighties in order to find a singly-authored paper by him.

Luc's professional activities are no less remarkable. His earlier and present directorship of the CRM look almost like minor tasks compared to his positions as Vice-Principal and Provost of McGill University and as rector of Université de Montréal. These years (1998-2010) were called his "dark years" by some of the conference speakers. He was praised for having come back to research after such a long period of administration. But in fact, his productivity had only diminished in his dark years from ten to two papers per year.

The conference, organized by Decio Levi (Rome), Willard Miller (Minneapolis) and Yves Saint-Aubin and Pavel Winternitz (both at CRM), had a format of thirty-minute lectures, many of them invited and some contributed. Both in their diversity of topics and their high quality of presented results they reflected the research personality of Luc Vinet. Topics of lectures ranged from "M-theory solutions, branes, and superalgebras" (by Eric d'Hoker, of string theory fame and early collaborator of Luc's) to "Physics based approaches to quantum computing" (by Edward Farhi). The speakers on OPSF topics included Erik Koelink, Paul Terwilliger, Luc Lapointe, Alexander Its, Charles Dunkl, Willard Miller, Dennis Stanton, Jan Felipe van Diejen, Francisco Marcellán, Sarah Post, Alexei Zhedanov, Tom Koornwinder, Yves Grandati, Erdal Emsiz, Mourad Ismail and Vincent Genest. Luc Vinet concluded the conference with a short lecture without spoken words, expressing his thanks to speakers and participants on a few slides.

The conference had two social events. On Monday, in the early evening, a string quartet of music students of the Université de Montréal played works of Haydn and Beethoven for Luc and the other participants. On Thursday evening there was the conference dinner in a restaurant in the touristic downtown area between the City Hall and the river. Pavel Winternitz and Yves Saint-Aubin gave impressive after-dinner speeches, certainly not boring. Luc's reply was impressive as well.

Most outside participants stayed at a hotel on Côte-des-Neiges Road (near campus). This is a lively neighbourhood with many shops and restaurants and a public piano on the street. The neighbourhood is dominated by the Oratoire Saint-Joseph, situated on a hill and with one of the largest church domes in the world. There are three parallel stairways leading to the church, the middle one being reserved for pilgrims moving on their knees. On campus, because of the time of year, the new students were undergoing initiation exercises. These involved strange rituals during which they had to yell all the time. The weather was very nice during the whole week.

[The photo of Luc Vinet was taken by Erik Koelink during the 30th International Colloquium on Group Theoretical Methods in Physics, Ghent University, Ghent, Belgium, 14-18 July 2014, where Vinet gave the opening lecture.]