CHRISTIANE ROUSSEAU¹

Université de Montréal Centre de Recherches Mathématiques

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CURRICULUM VITAE

Personal and Educational Data:

1954 born in Versailles, France; 1977 Ph.D. Université de Montréal, 1977; 1977-79 Postdoc, Mc Gill University.

Employment:

1979- Professor, Université de Montréal (Full Professor since 1991)

Research interests:

Dynamical systems: Hilbert's 16th problem, analytic dynamics.

Awards:

- Abel-Gauthier Prize 1999 from AMQ (association mathématique du Québec), for the personality of vear 1999.
- Teaching prize from Université de Montréal for the best academic book, with Yvan Saint-Aubin, 2009.
- Adrien-Pouliot Prize from AMQ (association mathématique du Québec) for the book "Mathématiques et technologie", with Yvan Saint-Aubin, 2009.

Selected Academic Service and Functions:

- Chair of Maths and Stat Dept, Université de Montréal, 1993-97.
- Vice-president of Canadian Mathematical Society, 1995-97.
- President of Canadian Mathematical Society, 2002-2004.
- Member of the Canadian Delegation to the General Assembly of the IMU, 2002, 2006, 2010.
- Co-organizer of a Canada School Mathematics Forum, Montreal, 2003.
- Chair of the CNC-IMU Committee, Canada, 2006-2008.
- Interim CRM Director: 2008-09.
- Organization of the Canadian bids for ICM 2014 and ICM 2010 in Montreal.
- Organization of the thematic semester "Dynamical systems and evolution equations" winter 2008 at CRM (with Walter Craig).
- Coordinator of a thematic year on "Mathematics of Planet Earth" in 2013 with 13 North-American institutes: www.mpe2013.org
- Member of the Klein project team, a joint IMU-ICMI initiative.

¹ A complete CV can be found at http://www.dms.umontreal.ca/~rousseac/

Six recent papers:

- The moduli space of germs of generic families of analytic diffeomorphisms unfolding of a codimension one resonant diffeomorphism or resonant saddle, J. Differential Equations, 248 (2010), 1794-1825.
- The Stokes phenomenon in the confluence of the hypergeometric equation using Riccati equation, with Caroline Lambert, Journal of Journal of Differential Equations, 244, (2008), 2641-2664.
- Analytical moduli for unfoldings of saddle-node vector-fields, with Loïc Teyssier, Moscow Mathematical Journal, 8, (2008), 547-614.
- Modulus of analytic classification for unfoldings of generic parabolic diffeomorphisms. With P. Mardesic and R. Roussarie, Moscow Mathematical Journal, 4, (2004), 455-498.
- Finite cyclicity of graphics with a nilpotent singularity of saddle or elliptic type, with H. Zhu, J. Differential Equations, 178, (2002), 325-436.

Books

- Mathématiques et technologie, with Yvan Saint-Aubin, Springer Undergraduate Texts in Mathematics and Technology, Springer, New York, 2008.
- Mathematics and technology, with Yvan Saint-Aubin, Springer Undergraduate Texts in Mathematics and Technology, Springer, New York, 2008.

Other realizations:

- Interest in popularization of mathematics: poster campaign in Montreal metro for WMY2000, organization of public lectures.
- Lectures in schools, involvement in math camps.
- Mathematical articles in the magazine Accromath for school teachers or students.
- Regular lecture at ICME 11, Monterrey, 2008.

STATEMENT AND DESCRIPTION OF ACTIVITIES

I am willing to commit myself to the IMU Executive Committee for a mandate for the period 2010-2014. In case the stable office of the IMU is established at the Fields Institute, I will work in close collaboration with my colleagues from the Fields Institute to oversee its establishment, administration and coordination with the IMU Executive Committee.

In my career, I have managed to combine my teaching, research and training activities with other activities on the side of promotion of mathematics: popularization of mathematics with the public, involvement in preservice teacher education, and activities in the schools with the kids and/or the school teachers. In Canada, I have been actively involved in bringing the Canadian community together (learned societies, institutes, MITACS) for the organization of joint activities: joint meetings including Canada-France congresses, Canada Mathematics Education Fora, etc, Canadian bids for ICM 2010 and 2014. I am now coordinating a North-American thematic year on *Mathematics of Planet Earth* in 2013.

I have always enjoyed bringing communities to work together. As far as promotion of mathematics is concerned, there are a lot of benefits in joining forces together at the international level, and I look forward working with IMU on this aspect. I hope to promote a great collaboration with ICMI on mathematics education matters.