

Foreword

The Poisson 2010 meeting, “Poisson Geometry in Mathematics and Physics”, was held from July 20 through 30, 2010, at the Instituto Nacional de Matemática Pura e Aplicada (IMPA) in Rio de Janeiro, Brazil. There were over 200 participants, including 27 invited speakers and 17 presenters at a poster session.

The meeting began with a 3 day School on Poisson Geometry, consisting of four lecture series designed to provide background for the conference lectures. The lecturers at the school were Gil Cavalcanti (Utrecht), Alberto Cattaneo (Zurich), Jiang-Hua Lu (Hong Kong) and Ieke Moerdijk (Utrecht). Hans Duistermaat had been invited to give lectures at this school, but sadly he passed away on the 19th of March, 2011.

The speakers for both the school and the conference were chosen by a Scientific Committee consisting of Yvette Kosmann-Schwarzbach (Ecole Polytechnique), Eckhard Meinrenken (U. Toronto), Tudor Ratiu (EPFL, Lausanne) and Alan Weinstein (U. C. Berkeley), and chaired by Rui Loja Fernandes (IST, Lisbon), with the help of an Advisory Committee composed of ten members. Local organization was handled by Henrique Bursztyn (IMPA) with the help of Giuseppe Dito (U. Bourgogne, Dijon), Marcos Jardim (Unicamp, Campinas), Jair Koiller (FGV, Rio de Janeiro) and Leonardo Macarini (UFRJ, Rio de Janeiro).

Sponsoring organizations for the conference and school included Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ), Instituto Nacional de Ciência e Tecnologia da Matemática (INCTMat), Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP), European Science Foundation (ESF), National Science Foundation (NSF) and International Mathematical Union (IMU). IMPA provided the majority of funding as well as additional support.

Poisson 2010 was the seventh in a series of international conferences on Poisson geometry, which are held every two years. The first meeting took

place in 1998 at the Banach center in Warsaw, with subsequent meetings at the CIRM in Luminy near Marseille, IST in Lisbon, the University of Luxemburg, National Olympics Memorial Youth Center in Tokyo and EPFL in Lausanne. Further information about all these meetings, as well as the one to be held in 2012 at Utrecht, can be found at the Poisson Geometry Home Page at poissongeometry.org.

At the Poisson 2008 meeting it was decided to establish an André Lichnerowicz prize to be awarded to researchers who had completed their doctorates at most eight years before the year of the Conference, for notable contributions to Poisson geometry. The prize was named in memory of André Lichnerowicz (1915-1998) whose work was fundamental in establishing Poisson geometry as a branch of mathematics. The André Lichnerowicz prize for the year 2010 was awarded jointly to Marco Gualtieri (University of Toronto) and Xiang Tang (Washington University in St. Louis) on the first day of the conference. According to the bylaws of the prize, the jury was composed of the members of the scientific and advisory committees. Funds for the prize were provided by IMPA.

The historical roots of Poisson geometry are in the 19th-century formulation of classical mechanics, and go back to the work of Poisson, Hamilton and Lie. The subject has undergone major development in the past decades, and it is now at the crossroads of several areas of (pure and applied) mathematics and mathematical physics, including differential geometry, Lie theory, noncommutative algebra, quantization, representation theory, quantum groups, differential equations, integrable systems, geometric mechanics. The aim of these meetings has been to bring together mathematicians and mathematical physicists who work in diverse areas but share a common interest in Poisson geometry. The present volume consists of refereed papers by many of the invited speakers at the Poisson 2010 conference and reflects this diversity.

Editors of this issue of the Bulletin

Henrique Bursztyn, Rui Loja Fernandes, Jiang-Hua Lu and Alan Weinstein