

# The Geometry, Topology and Physics of Moduli Spaces of Higgs Bundles

Institute for Mathematical Sciences, Singapore

7 July - 29 August, 2014

<http://www2.ims.nus.edu.sg/Programs/014geometry/index.php>

## Overview

The subject of this program is the moduli space of Higgs bundles and its connections with different areas of mathematics and physics. This space was first studied by Nigel Hitchin, who constructed the moduli space using gauge theory. In Hitchin's words: "...the moduli space of all solutions turns out to be a manifold with an extremely rich geometric structure".

## Activities

### Summer School: 7 - 18 July 2014

There will be short courses and introductory talks by experts. Students and postdocs from around the world, especially from developing countries in Asia, are invited to participate.

Main speakers:

Olivier Guichard (Université de Strasbourg, France) • Tony Pantev (University of Pennsylvania, USA) • Siye Wu (The University of Hong Kong, Hong Kong)

### Workshop on the Themes of the Summer School: 21 - 25 July 2014

Leading researchers will give talks on the current research in the field related to the themes of the summer school. There will also be space for talks by graduate students and postdocs.

### ICM Satellite Conference: 4 - 8 August 2014

Confirmed speakers:

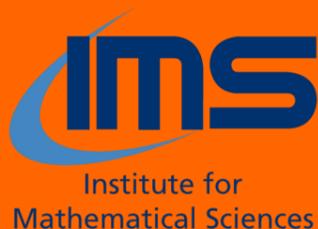
Philip Boalch (École Normale Supérieure and CNRS, France) • Sergey Cherkis (The University of Arizona, USA) • Tudor Dimofte (Institute for Advanced Study, USA) • Oscar García-Prada (Institute of Mathematical Sciences, ICMAT, Spain) • Tamás Hausel (École Polytechnique Fédérale de Lausanne, Switzerland) • Andriy Haydys (Universität Bielefeld, Germany) • Jochen Heinloth (Universität Duisburg-Essen, Germany) • Marcos Jardim (Universidade Estadual de Campinas, Brazil) • Takuro Mochizuki (Kyoto University, Japan) • Misha Verbitsky (Higher School of Economics, Moscow)

## Organizing Committee

*Co-chairs:* Richard A. Wentworth (University of Maryland) and Graeme Wilkin (National University of Singapore)

*Members:* Luis Álvarez-Cónsul (ICMAT), Steven Bradlow (University of Illinois at Urbana-Champaign), Tomás Gómez (ICMAT), François Labourie (Université Paris-Sud), Kenji Ueno (Yokkaichi University)

Gardens by the Bay photo courtesy of Laura Schaposnik



Co-Sponsored By:

