

**Submittee:** Scott Sutherland

**Date Submitted:** 2016-07-16 12:50

**Title:** North-American Workshop in Holomorphic Dynamics (Celebrating John Milnor 85th. Blrthday)

**Event Type:** Conference-Workshop

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**Location:**

Cancun, Mexico

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**Dates:**

May 27 - June 4, 2016

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**Topic:**

Holomorphic Dynamics in One and Several Variables, Quasiconformal Surgery and Transcendental Maps, Foliations, Thurston Theorem and rational maps

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**Methodology:**

The first two days (May 28 and 29) consisted of minicourses on the topics of Teichmuller theory, foliations, Thurston's classification of rational maps, and quasi-conformal surgery. The minicourses followed by a five-day conference presenting current research (May 30-June 3). On Tuesday May 31, and Thursday June 2, there were poster presentations by graduate students and recent postdocs.

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**Objectives Achieved:**

We believe our workshop had the following outcomes:

- 1) Increased interaction between US, Canadian, and Mexican researchers in holomorphic dynamics, strengthening the academic ties between the three nations. Because of the multi-national nature of the workshop, collaborations between North-American researchers and those of other nationalities were also increased.
  - 2) Fostered interaction of young US, Canadian, and Mexican researchers with world-renowned leaders in the field, yielding clear benefits to their professional growth, as well as enhancing the growth of the field of holomorphic dynamics in general.
  - 3) Broadened the professional opportunities of Canadian and US-researchers to include Mexican institutions such as UNAM and CIMAT. Conversely, it also broaden the awareness of Canadian and US institutions of the strength of Mexican researchers, who may in the future come to visit their institutions.
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**Scientific Highlights:**

The minicourses were chosen to allow acknowledged experts to introduce newcomers to central ideas in the field. These were followed by research talks of the highest mathematical caliber delivered by confirmed leaders in holomorphic dynamics and closely related fields such as foliations, Teichmüller theory, complex geometry and topology. The research talks were of interest to both experts and beginning researchers.

We are happy to report that the workshop was attended by a good number of very distinguished participants.

For the slides of the conferences and videos of some of the talks please refer to <http://www.math.stonybrook.edu/~jackfest/Talks/>

The list of participants is attached (see additional upload 2).

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### **Organizers:**

Bonifant, Araceli, Mathematics Department, University of Rhode Island, US  
Cabrera, Carlos, Instituto de Matematicas UNAM-Cuernavaca, Mexico  
Seade, Jose, Instituto de Matematicas UNAM, Mexico  
Sutherland, Scott, Stony Brook University, US

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### **Speakers:**

#### MINICOURSES

Xavier Gomez-Mont (Centro de Investigacion en Matematicas- CIMAT)  
John Hubbard (Cornell University)  
Nikita Selinger (University of Alabama at Birmingham)  
Nuria Fagella (Universitat de Barcelona)

#### CONFIRMED SPEAKERS

Eric Bedford (Stony Brook University)  
Gamaliel Ble (Universidad Juarez Autonoma de Tabasco)  
Xavier Buff (Institut de Mathematiques de Toulouse)  
Carlos Cabrera (Instituto de Matematicas UNAM, Unidad Cuernavaca)  
Adam Epstein (Warwick University)  
Jan Kiwi (Pontificia Universidad Catolica de Chile)  
Sarah Koch (University of Michigan)  
Luna Lomonaco (Universidade de Sao Paulo)  
Misha Lyubich (Stony Brook University)  
Curt McMullen (Harvard University)  
John Milnor (Stony Brook University)  
Rodrigo Perez (Indiana-University-Purdue University Indianapolis)  
Pascale Roesch (Institut de Mathematiques de Toulouse)  
Mitsuhiro Shishikura (Kyoto University)  
Alberto Verjovsky (Instituto de Matematicas UNAM, Unidad Cuernavaca)  
Misha Yampolsky (University of Toronto)  
Saeed Zakeri (Queens College/Graduate Center CUNY)

For talks abstracts: Please see attached document (additional upload 1)

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**Links:**

<http://www.math.stonybrook.edu/~jackfest/>

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**Comments / Miscellaneous:**

We had 111 participants registered for the workshop from Brazil, Canada, Chile, Denmark, England, France, Ireland, Japan, Mexico, Poland, Spain and the US.

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**File Uploads:**

Additional Upload 1: [http://www.pims.math.ca/files/final\\_report/schedule\\_2.pdf](http://www.pims.math.ca/files/final_report/schedule_2.pdf)

Additional Upload 2: [http://www.pims.math.ca/files/final\\_report/participantlist.pdf](http://www.pims.math.ca/files/final_report/participantlist.pdf)

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