



# 30<sup>TH</sup> IUGG CONFERENCE ON MATHEMATICAL GEOPHYSICS



## Mathematical Geophysics 2014 2-6 June 2014 Mérida, Yucatán, Mexico

---

### Local Organizing Committee

---

#### National Autonomous University of Mexico (UNAM)

Francisco J. Sánchez-Sesma (Conf. Chair) Engineering Institute  
Fabián García-Nocetti (Program Co-Chair) Applied Math Institute  
Graciela S. Herrera-Zamarrón (Program Co-Chair) Geophysics Inst  
Ursula Iturrarán-Viveros (Program Co-Chair) School of Sciences  
Juan José Pérez-Gavilán (Finance Co-Chair) Engineering Institute

#### Mathematical and Computational Modeling: An international conference to honor

*Professor Ismael Herrera*

---

### Scientific Program

---

#### Sessions

##### 1. Monday June 2, 2014

##### **Computational seismology**

Convener – Jacobo Bielak (Carnegie Mellon University)

Convener – Héctor Benitez (IIMAS, UNAM)

Opening Lecturer – Ismael Herrera (Geophysics Institute UNAM)

<http://mmc.igeofcu.unam.mx/iherrera>

##### 2. Monday June 2, 2014

##### **Four paradigms in predicting extremes: Legacy of Vladimir I. Keilis-Borok**

Conveners

Alik Ismail-Zadeh, Karlsruhe Institute of Technology, Germany

Ilya Zaliapin, University of Nevada Reno, USA

Yehuda Ben-Zion, University of Southern California, USA  
Invited speaker: George Molchan, Russian Ac. Sci., Russia  
Invited speaker: Andrei Gabrielov, Purdue University, USA  
<http://www.math.purdue.edu/~agabriel>

**3. Tuesday June 3, 2014**

**Nonlinear phenomena in the climate system**

Convener, Henk Dijkstra (Institute for Marine and Atmospheric research Utrecht - IMAU) [H.A.Dijkstra@uu.nl](mailto:H.A.Dijkstra@uu.nl)

Chris Jones (Department of Mathematics, The University of North Carolina, USA)

**4. Tuesday June 3, 2014**

**Mathematical and numerical modeling of enhanced oil recovery**

Convener – Luis Miguel de la Cruz (Geophysics Institute UNAM)

Convener – John Chen (University of Calgary)

Invited speaker: Dr. Renee Perez Rodriguez

<http://www.geochemicalengineering.com>

**5. Wednesday June 4, 2014**

**Fluids, friction and rheology, in rocks and porous media**

Convener - Renaud Toussaint (Univ. Strasbourg, France)

Convener – Graciela Herrera-Zamarrón (Geophysics Institute UNAM)

**6. Wednesday June 4, 2014**

**Ambient seismic noise, diffuse fields and interferometry**

Convener – Francisco Sánchez Sesma (Engineering Institute UNAM)

Convener – Michel Campillo (ISTerre, University J Fourier, Grenoble)

**7. Thursday June 5, 2014**

Field trip to Chichen-Itza (optional)

**8. Friday June 6, 2014**

**Surface-atmosphere interaction**

Convener Fabio D'Andrea (ENS, France)

Convener - Arón Jazcilevich Daimant (Atmospheric Sc. Center UNAM)

Invited speaker: Dr. Victor Brovkin from Max Planck Institute for Meteorology

<http://www.mpimet.mpg.de/en/staff/victor-brovkin.html>

**9. Friday June 6, 2014**

**Ocean vertical velocities: from dissipation scales to the global overturning circulation**

Convener - Annalisa Bracco (Georgia Tech) web site [www.o3d.org/abbracco](http://www.o3d.org/abbracco)

Invited speaker: Andrew Poje <http://www.math.csi.cuny.edu/~poje/>