

**Submittee:** Michael Li

**Date Submitted:** 2017-10-30 14:12

**Title:** The XI Americas Conference on Differential Equations and Nonlinear Analysis

**Event Type:** Conference-Workshop

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**Location:**

University of Alberta

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**Dates:**

August 12 - 19, 2017

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**Topic:**

Differential equations, Nonlinear analysis, dynamical systems, and applications in engineering, life sciences, physical sciences and social sciences.

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**Methodology:**

Three-day tutorials for graduate students and a 5-day conference that included plenary lectures, theme scientific sessions, contributed talks, and a poster session on the web.

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**Organizers:**

Michael Li, James Muldowney, and Yingfei Yi, Department of Mathematical and Statistical Sciences, University of Alberta

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**Speakers:**

Main lectures for the Tutorials for graduate students:

1. Walter Craig, Department of Mathematics and Statistics, McMaster University, Canada, "Hamiltonian PDE and water waves"
2. Rafael de la Llave, School of Mathematics, Georgia Tech, USA, "Invariant manifolds: Theory and computation"
3. Hildebrando Rodrigues, Institute of Mathematics and Computer Science, University of Sao Paulo at Sao Carlos, Brazil, "Synchronization and Applications"
4. Konstantin Mischaikow, Department of Mathematics, Rutgers University, USA, "Characterizing global dynamics for data driven dynamics"
5. Noemi Wolanski, School of Mathematics, University of Buenos Aires, Argentina, "Reaction-diffusion processes, singular perturbation and free boundary problems"
6. Jianhong Wu, Department of Mathematics and Statistics, York University, Canada, "Modeling

dynamic spread patterns of diseases in nature communicable to men"

## Plenary Speakers for the Americas Conference

1. Lai-Sang Young, Courant Institute, New York University, USA, "Capturing dynamical complexity"
2. Jean-Philippe Lessard, Department of Mathematics and Statistics, Université Laval, Canada, "Rigorously verified computing for infinite dimensional nonlinear dynamics: a functional analytic approach"
3. Manuel de Pino, Universidad de Chile, Chile, "Blow-up by bubbling in some critical parabolic equations"
4. Mayra Nájera López, Department of Mathematics, UNAM, Mexico, "Transmission dynamics of two Dengue serotypes with vaccination scenarios"
5. Genevieve Raugel, Department of Mathematics, Université Paris-Sud, France, "Dynamics of the weakly damped focusing subcritical Klein-Gordon equation"
6. Alexandre de Carvalho, Institute of Mathematics and Computing Science, University of Sao Paulo at Sao Carlos, Brazil, "Non-autonomous Morse-Smale dynamical systems: structural stability under non-autonomous perturbations"
7. David Damanik, Department of Mathematics, Rice University, USA, "The KdV equation with almost periodic initial data"
8. Peter Miller, Department of Mathematics, University of Michigan, USA, "Singular limits for integrable nonlinear wave equations"
9. Weishi Liu, Department of Mathematics, University of Kansas, USA, "Dynamics of Poisson-Nernst-Planck systems and ion channel problems"
10. Julien Arino, Department of Mathematics and Statistics, University of Manitoba, Canada, "Meta-population models of spread of infectious diseases in discrete space"
12. Robert Pego, Department of Mathematics, Carnegie Mellon University, USA
13. Robert McCann, Department of Mathematics, University of Toronto, Canada
14. Renato Iturriaga, Center for Research in Mathematics, Mexico
15. Kening Lu, Department of Mathematics, Brigham Young University, USA
16. Leandro del Pezzo, Facultad de Ciencias Exactas y Naturales, Argentina
17. Mason Porter, Department of Mathematics, UCLA, USA
18. John Mallet-Paret, Lefschetz Center for Dynamical Systems, Brown University, USA, Inaugural G. R. Sell Lecture.

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**Links:**

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