Analysis of Partial Differential Equations using Dynamical Systems Techniques: A conference in honor of the 60th birthday of C. Eugene Wayne

Boston University, June 1-3, 2016

Schedule

<table>
<thead>
<tr>
<th>Time</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Jean-Pierre Eckmann</td>
<td>Vivi Rottschäfer</td>
<td>Bob Pego</td>
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<td>10:00</td>
<td>Keith Promislow</td>
<td>David Ambrose</td>
<td>Rafael de la Llave</td>
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<td>11:00</td>
<td>Coffee Break</td>
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<td>11:30</td>
<td>Guido Schneider</td>
<td>Matt Holzer</td>
<td>Walter Craig</td>
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<td>12:30</td>
<td>Lunch</td>
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<td>2:00</td>
<td>Karsten Matthies</td>
<td>Krešimir Josić</td>
<td>Dario Bambusi</td>
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<td>3:00</td>
<td>Livia Corsi</td>
<td>Miles Wheeler</td>
<td>David Uminsky</td>
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<td>Ting-Hao Hsu</td>
<td>Kelly McQuighan</td>
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<td>4:00</td>
<td>Coffee Break</td>
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<td>4:30</td>
<td>Lee DeVille</td>
<td>Arthur Jaffe</td>
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<tr>
<td>5:30</td>
<td>Break</td>
<td>Break</td>
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<td>6:00</td>
<td>Poster Session</td>
<td>Banquet</td>
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<td>and Reception</td>
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Location (see map next page):

- All talks and coffee breaks: Photonics room 211, 8 St Mary’s St. (Can enter on Babbit St.) The room will have both a blackboard and a projector. Details can be found at http://www.bu.edu/classrooms/classroom/pho-211/.
- Poster session: Math department room 148, 111 Cummington Mall
- Banquet: Scoozi, 580 Commonwealth Ave.
- Lunch: recommendations on map on next page
Photonics Building
Math Department
Scoozi
Mei Mei (Chinese-American)
Nud Pob (Thai)
Pavement (coffee, sandwiches)
Subway, Convenience Store
Basho express (sushi, rice bowls)
Campus Trolley (Middle-Eastern wraps, salads)

Starbucks
Wednesday

Talks

- Jean-Pierre Eckmann: “Hamiltonian Chains of Rotators, with added Dissipation: How fast does one converge to zero”
- Keith Promislow: “The dynamics of packing in chemical systems”
- Guido Schneider: “Validity and non-validity of amplitude equations for water wave problem like systems”
- Karsten Matthies: “Asymptotics and stability of solitary waves in the high-energy limit of FPU-type chains”
- Livia Corsi: “Blossoming resonant tori: mind the gaps”
- Ting-Hao Hsu: “Viscous singular shock profiles for some systems of conservation laws using geometric singular perturbation theory”
- Lee DeVille: “The Spectrum of Signed Laplacians, or: Feuds, Coalitions, and Love Triangles”

Poster Session

The poster session will take place in the BU math department, at 111 Cummington Mall. It will coincide with a reception, where light food and drinks will be available. The presentations will be:

- Paul Carter: “Transonic canards and stellar wind”
- Veronica Ciocanel: “PDE Models of mRNA Localization in Xenopus (frog) egg cells”
- Timothy Faver: “Traveling Waves in Diatomic Fermi-Pasta-Ulam-Tsingou Lattices”
- Ryan Goh: “Pattern formation in the wake of external mechanisms”
- Kevin O’Keeffe: “Swarming Oscillators”
- Ashish Pandey: “Modulational instability in a full-dispersion shallow water model”
- Benjamin Ponedel: “Forced Snaking”
- Shuxia Tang: “Asymptotic stability of a KdV equation with a 2-dim center manifold”
- Dario Valdebenito: “Quasiperiodic solutions to elliptic equations in $\mathbb{R}^d$”
- Alexandria Volkening: “Agent-based models of zebrafish stripes”
- Chi-Ru Yang: “Birkhoff normal form for null form wave equations”
- Xiaoxia “Jessica” Xie: “Two types of nonlocal diffusions and the convergence to the random/normal diffusion”
Thursday

Talks

- Vivi Rottschäfer: “Patterns and coherence resonance in the stochastic Swift-Hohenberg equation with Pyragas control”
- David Ambrose: “On vortex sheets and mean field games”
- Matt Holzer: “Linear spreading speeds from nonlinear resonant interaction”
- Kresimir Josić: “Evidence accumulation in changing environments”
- Miles Wheeler: “Stratified solitary water waves”
- Kelly McQuighan: “Towards metastability in the Burgers equation with periodic boundary conditions”
- Arthur Jaffe: “Truth and Beauty in Physics and Mathematics”

Banquet
The dinner banquet will take place at the restaurant Scoozi, at 580 Commonwealth Avenue, which is about a ten minute walk from the Photonics building. Appetizers will be served at 6pm, with a buffet dinner to follow around 7pm. A cash bar will be available throughout.

Friday

Talks

- Bob Pego: “Euler sprays and optimal transportation”
- Rafael de la Llave: “An a-posteriori KAM theorem for whiskered tori in PDE”
- Walter Craig: “Vortex filament dynamics”
- Dario Bambusi: “Reducibility of time dependent quantum systems with unbounded perturbation”
- David Uminsky: “Pattern formation in large particle systems”