Minisymposium at NW12 on

Hamiltonian & Symplectic Methods in the theory of nonlinear waves

Organizers: Thomas J. Bridges & Frédéric Chardard

MS1 — **Wednesday June 13**

http://meetings.siam.org/sess/dsp_programsess.cfm?SESSIONCODE=14120

10:00 Frédéric Chardard (École Normale Supèrieure de Lyon, France) *On the stability of some periodic waves arising in the Kawahara equation*

10:30 Gianne Derks (University of Surrey, UK) *Viscosity-induced instability for Euler and averaged Euler equations in a circular domain*

11:00 Denys Dutykh (University de Savoie, France) *Relaxed variational principle for water wave modeling*

11:30 Brian Moore (University of Central Florida, USA) *Geometric integration for damped Hamiltonian PDEs*

12:00 Sergey Gavrilyuk (University of Aix-Marseille, France) *A new model of roll waves: comparison with Brock's experiments*

MS9 — **Wednesday June 13**

http://meetings.siam.org/sess/dsp_programsess.cfm?SESSIONCODE=14121

2:00 Roger Grimshaw (Loughborough University, UK) *The reduced Ostrovsky equation: integrability and breaking*

2:30 Mariana Hărăguş (Universite de Franche-Comté, France) *Transverse spectral stability of periodic waves*

3:00 David Lloyd (University of Surrey, UK) *Hamiltonian structure of the ferrofluid problem*

3:30 Robert Marangell (University of Sydney, Australia) *The Morse and Maslov indices for periodic problems*

4:00 Vassilios Rothos (Aristotle University of Thessaloniki, Greece) *Statics and dynamics of atomic dark-bright solitons in the presence of localized impurities*

MS16 — **Thursday June 14**

10:00 Kieron Moore (Loughborough University) *Weakly nonlinear solution of initial value problem for Boussinesq-type equations*

10:30 Pascal Noble (Université Claude Bernard Lyon I, France) *Whitham modulation equations for Korteweg-de Vries/Kuramoto-Sivashinsky equations*

11:00 Constance Schober (University of Central Florida, USA) *Stability of homoclinic orbits of the nonlinear Schrodinger equation*

11:30 Erik Wahlén (Lund University, Sweden) *A Dimension-breaking phenomenon for steady water waves with weak surface tension*

12:00 Tom Bridges (University of Surrey, UK) *Emergence of unsteady dark solitary waves from large-amplitude periodic patterns*