

# *Mathematical problems in hydrodynamics*

*14-25 June 2010*

## **List of speakers and titles**

### **Ten-hour courses**

Walter Craig: *The dynamics of free surface water waves*  
Sergei Kuksin: *Mathematics of 2D statistical hydrodynamics*

### **Five-hour courses**

Freddy Bouchet: *Out of equilibrium statistical mechanics of the large scales of two-dimensional and geostrophic turbulence*  
Eduard Feireisl: *Asymptotic properties of complete fluid systems*  
David Gérard-Varet: *Navier-Stokes equations and boundary layer*  
Olivier Glass: *Controllability questions for several hydrodynamical models*

### **One-hour invited talks**

Claude Bardos: *Loss of smoothness and energy conservation in the 3D Euler equation with rough initial data*  
Jean-Michel Coron: *On some control problems in fluid mechanics*  
Arnaud Debussche: *Markov solutions and ergodicity for 3D stochastic Navier-Stokes equations*  
Antti Kupiainen: *On Fourier's law*