

McMaster University





University of Waterloo

THE FIELDS INSTITUTE FOR RESEARCH IN MATHEMATICAL SCIENCES

COLLOQUIUM IN DYNAMICAL SYSTEMS

SPEAKER:

GÉRARD IOOSS Institut Non-Linear de Nice University of Nice, France

On the Topic:

"Water waves for small surface tension: a normal form approach"

We show how the water-wave problem reduces to a reversible 4 dimensional ODE, whose linear part has a double zero and a pair of pure imaginary eigenvalues, for Bond numbers less than 1/3 and Froude numbers near 1. We give the "reversible" normal form which is integrable and solve it. We discuss what solutions persist for the full problem.

Wednesday, November 11, 1992 at 3:30pm, room 3018

at

The Fields Institute

185 Columbia Street West, Waterloo, Ontario N2L 5Z5 Telephone: (519) 725-0096 Fax: (519) 725-0704 Supported by the Ministry of Colleges and Universities of Ontario and the Natural Sciences and Engineering Research Council of Canada