

# INSTITUTE OF ADVANCED STUDIES IN MATHEMATICS

Technion-Israel Institute of Technology



INTERNATIONAL WORKSHOP

on

## DIFFERENTIAL EQUATIONS, NUMERICAL ANALYSIS AND APPLICATIONS

(In honor of Roger Temam's 60th Birthday)

5 June, 2000

Room 232  
Amado Mathematics Building  
Technion, Haifa, Israel

*Organizers:* Matania Ben-Artzi (Hebrew University of Jerusalem)  
Jacob Rubinstein (Technion--Israel Institute of Technology)

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### PROGRAM

- 10:30    Opening (M. Ben-Artzi)
- 10:35    S. Kamin (Tel Aviv University)  
Long-time behaviour of solutions for a system of detonation
- 11:10    M. Israeli (Technion)  
Low communication domain matching for large scale solution of elliptic PDE's
- 11:45    

- 12:00 J. Rubinstein (Technion)  
A nonlocal theory of suspensions
- 12:35 Y. Yomdin (Weizmann Institute)  
High order representation and processing of noisy discontinuous data - an example:  
Image analysis and compression
- 13:10 M. Goldberg (Technion)  
Finite Difference Schemes for Parabolic Systems Revisited
- 13:45 Lunch break
- 15:15 P. Rosenau (Tel Aviv University)  
A Parable on a Parabolic Hedgehog
- 15:50 S. Kaniel (Hebrew University)  
On the Derivation of the Equations of Motion in Gravity Theories
- 16:25 
- 17:00 M. Ben-Artzi (Hebrew University)  
Numerical Approach to the 2-D Navier-Stokes Equations
- 17:35 I. Shafrir (Technion)  
Asymptotic behavior of minimizing sequences for Hardy's inequality
- 19:00 Dinner