



Israel Association for Computational Methods in Mechanics – IACMM

42nd Israel Symposium on Computational Mechanics - ISCM42

Thursday, March 30, 2017

Morning sessions

- 08:45** **Registration**
- 09:15 – 09:30** **Greetings**
Prof. Danny Rittel
Deputy senior vice president, Technion
- 09:30 – 10:30** **Invited lecture**
Prof. Natarajan Sukumar
Department of Civil and Environmental Engineering, UC Davis, CA, USA
Maximum-entropy meshfree methods in computational mechanics
- 10:30 – 10:50** **Coffee break**
- 10:50 – 12:30** **Lecture session A**
- 10:50 – 11:10** **Mark Epshtein and Netanel Korin**
Faculty of Biomedical Engineering, Technion
Combining computational and in vitro approaches for engineering
Mechano-responsive drug carriers
- 11:10 – 11:30** **Sefi Givli and Shimrit Katz**
Faculty of Mechanical Engineering, Technion
Curvature-induced spatial ordering of composition in lipid membranes
- 11:30 – 11:50** **Yaniv Ben David and Daphne Weihs**
Faculty of Biomedical Engineering, Technion
Finite elements simulations to show force application mechanisms of
invasive cancer cells
- 11:50 – 12:10** **Igor Shufrin**
Department of Structural Engineering, Faculty of Engineering Sciences, Ben-Gurion University of the Negev
3D Cosserat continuum modelling of hybrid metamaterials via
homogenization by differential expansion
- 12:10 – 12:30** **Timo Saksala**
Lab. of Civil Engineering, Tampere University of Technology, Tampere, Finland
Numerical modelling of dynamic Brazilian disc test on thermal shock
weakened granite
- 12:30 – 13:30** **Lunch break**
IACMM Council meeting



Afternoon sessions

- 13:30 – 13:50** **IACMM General Assembly**
Awards ceremony:
Winner of the ISCM 40-41 best presentation – Mr Lior Medina
Second price of the ISCM 40-41 best presentation – Mr Tomer Levin
Best PhD thesis in CM in 2016 – Dr. Alexander Kleiman
- 13:50 – 15:10** **Lecture session B**
- 13:50 – 14:10** **Hanan Amar and Dan Givoli**
Faculty of Aerospace Engineering, Technion
Mixed-dimensional modeling of time-dependent wave problems using the nitsche method
- 14:10 – 15:30** **Elad Priel, Brigit Mittelman and Shlomo Haroush**
Department of Mechanical Engineering – Shamoon College of Engineering
The small punch test method applied to non-standard test specimens: A computational study validated by experiments
- 14:30 – 14:50** **Alexander Gelfgat and Viacheslav Burkin**
School of Mechanical Engineering, Tel-Aviv University
Application of diffusive interface method to thermocapillary driven flow of two immiscible fluids
- 14:50 – 15:10** **Yuri Feldman**
Department of Mechanical Engineering, Faculty of Engineering Sciences, Ben-Gurion University of the Negev
Implicit direct forcing immersed boundary method for incompressible viscous thermal flow problems: a Schur complement approach
- 15:10 – 15:30** **Coffee break**
- 15:30 – 16:30** **Tutorial**
Prof. Oded Amir
Faculty of Civil and Environmental Engineering, Technion
Topology optimization
- 16:30** **Closing**