

# Programme of GCM'6

## *OPENING OF THE SYMPOSIUM (Sunday 22, 14.00-15.00)*

### *Session A. CONFIGURATIONAL FORCES, MATERIAL MANIFOLD AND MATHEMATICAL BACKGROUND (Sunday 22, 15.00-18.30)*

- Gerard Maugin  
RECENT ADVANCES IN  $M^3$  (MECHANICS ON THE MATERIAL MANIFOLD)
- Jovo Jarić and Zoran Golubović  
CONFIGURATIONAL FORCES AND COUPLES FOR CRACK PROPAGATION
- Vassilios K Kalpakides and E K Agiasofitou  
CONFIGURATIONAL BALANCE LAWS FOR DYNAMICAL FRACTURE
- Teodor Atanackovic and B. Novakovic  
ON A FRACTIONAL DERIVATIVE TYPE OF A VISCOELASTIC BODY
- Miroslav Silhavy  
AN  $O(2)$  INVARIANT RANK 1 CONVEX FUNCTION THAT IS NOT POLYCONVEX

### *Session B. HOMOGENIZATION AND NONSIMPLE CONTINUA (Monday 23, 09.30-14.00)*

- Jozef J. Telega and Wlodzimierz Bielski  
STOCHASTIC HOMOGENIZATION AND MACROSCOPIC MODELLING OF COMPOSITES AND FLOW THROUGH POROUS MEDIA
- Alexander B. Freidin  
TWO-PHASE DEFORMATIONS WITHIN THE FRAMEWORK OF PHASE TRANSITION ZONES
- Igor Sevostianov  
CORRELATION BETWEEN MECHANICAL AND CONDUCTIVE PROPERTIES OF POROUS / MICROCRACKED METALS.
- Paolo Podio-Guidugli  
CONTACT INTERACTIONS, STRESS AND MATERIAL SYMMETRY FOR NONSIMPLE ELASTIC MATERIALS
- Samuel FOREST  
HOMOGENIZATION METHODS AND THE MECHANICS OF GENERALIZED CONTINUA - PART 2
- Sara QUILIGOTTI  
ON BULK GROWTH MECHANICS OF SOLID-FLUID MIXTURES: KINEMATICS AND INVARIANCE REQUIREMENTS

### *Session C. INELASTICITY, DISLOCATIONS AND INCOMPATIBILITY (Monday 23, 15.45-18.00)*

- Luka Vujosevic and Vlado A. Lubarda  
FINITE-STRAIN THERMOELASTICITY BASED ON MULTIPLICATIVE DECOMPOSITION OF DEFORMATION GRADIENT
- Sanda Cleja-Tigoiu  
SMALL ELASTIC STRAINS IN FINITE ELASTO-PLASTIC MATERIALS WITH CONTINUOUSLY DISTRIBUTED DISLOCATIONS
- Milan V Micunovic  
LOW ORDER INELASTIC MICROMORPHIC POLYCRYSTALS

### *Session D. RELATIVITY, SPIN AND VORTEX ISSUES (Tuesday 24, 10.00-13.00)*

- Maurizio Brocato and Gianfranco Capriz  
SPIN FLUIDS AND HYPERFLUIDS
- David A. Burton, Robin W. Tucker and C. Wang  
SPIN DRIVEN MOTION IN INTENSE SPACETIME WAVE GEOMETRIES
- Heiko J. Herrmann, G. Ruckner, W. Muschik and H.H. v. Borzeszkowski  
SPIN AXIOMS IN RELATIVISTIC CONTINUUM PHYSICS
- David A. Burton and Robin W. Tucker  
GEOMETRY AND DYNAMICS OF VORTEX SHEETS IN 3 DIMENSIONS

### *Panel discussion:*

### *STRUCTURAL DEFECTS IN MICRO AND MACRO WORLD (Tuesday 24, 15.00-16.00)*

## *CLOSING OF THE SYMPOSIUM*