|                       | Monday June 18  | Tuesday June 19   | Wednesday June  | Thursday June 21   | Friday June 22  |  |  |
|-----------------------|---|---|---|--|---|--|--|
|                       | $8^{55}$ : <b>Opening</b>   |   | 20  |  |   |  |  |
| $9 - 9^{30}$          | D. Jeulin A (non<br>random) walk across<br>models and applications<br>of random structures<br>(p. 3)                                  | J. ESCODA Granular<br>material modeling for<br>non-destructive testing<br>simulation (p. 15)  | K. Sab Homogenization of stress-gradient composites materials (p. 34)   | V. Capasso Some<br>Applications of the<br>Theory of Random<br>Currents (p. 10)   | J. CHANIOT From Tortuosity to Narrowness: Straightforward Porous Media Characterization (p. 13)                                       |  |  |
| $9^{30} - 10$         | É. MAIRE X-Ray Computed Tomography and FIB/SEM Tomography applied to Lithium battery electrodes (p. 3)                                | L. LACOURT Multiscale<br>modeling of mesoscopic<br>defects in laser-welded<br>structures (p. 16)  | P. Suquet<br>Computational<br>micromechanics: a<br>variational derivation of<br>FFT-based schemes (p. 35)                       | J. Sanahuja Ageing<br>linear viscoelastic<br>behaviour of<br>microstructure-evolving<br>porous media: estimates<br>from mean-field<br>homogenization (p. 31)   | M. Neumann Quantification of the microstructure influence on permeability, using virtual materials testing (p. 49)                    |  |  |
| $10 - 10^{30}$        | S. VELASCO-FORERO A review of Stochastic Watershed: integrating shape, texture, spectral, and hierarchical information (p. 4)         | H. Andrä Electro-Chemo-Mechanical Simulation on Microstructures for Lithium-Ion Batteries (p. 19)   | G. MILTON A new faster FFT approach using a novel algebra of subspace collections to computing the fields in composites (p. 37) | J. Dirrenberger<br>Bio-inspired architectured<br>hybrid lattice structures<br>(p. 32)  | F. Chattl Finite element modelling of entangled carbon fiber during compression tests. Evolution of morphological parameters. (p. 51) |  |  |
| $10^{30} - 11$        |   | Coffee Break  |   |  |   |  |  |
| 11 – 11 <sup>30</sup> | G. NOYEL Homogeneity of a Region in the Logarithmic Image Processing Framework (p. 5)   | V. SCHMIDT Stochastic 3D microstructure modeling for the prediction of permeability and conductivity of three-phase microstructures (p. 20) | A. CHERKAEV Modeling<br>and robust design of<br>objects with uncertain<br>behavior: Damage spread<br>in beam lattices (p. 45)   | M. G. Tarantino Numerical and experimental study on effective elastic properties of 3D printed-controlled random porous material numerically generated (p. 28) | V. SILBERSCHMIDT Mechanics of Random Fibrous Networks (p. 52)   |  |  |
| $11^{30} - 12$        | F. HILD A unified framework for the identification of constitutive parameters from experimentally measured displacement fields (p. 8) | L. DE ARCANGELIS On<br>the micromechanics of a<br>granular seismic fault<br>model (p. 21)   | A. Acharya Line Defect<br>dynamics and solid<br>mechanics (p. 33)   | F. LATOURTE SEM vs CPFEM to study dual phase steel: from 3D microstructure reconstruction up to lattice rotation and plasticity fields (p. 40)                 | $11^{30}$ – $11^{35}$ : Closing   |  |  |
| $12 - 13^{30}$        | Lunch   |   |   |  |   |  |  |

|                | Monday June 18  | Tuesday June 19  | Wednes-        | Thursday June 21  |
|----------------|---|--|----------------|---|
|                |   |  | day            |   |
|                |   |  | June 20        |   |
| $13^{30} - 14$ | C. Lantuéjoul Estimation of the percolation threshold of boolean models (p. 9)  | D. Bernard 3D modelling of ferroelectric composite properties using X-ray micro tomography images: Effective permittivity and tunability (p. 21)   |                | L. Delannay How grain shape<br>influences backstresses and dislocation<br>slip in fcc crystals (p. 40)  |
| $14 - 14^{30}$ | J. Angulo Boolean Random Function<br>Characterization and<br>(max, min)-convolution (p. 9)  | S. Kanaun Hydraulic Fracture Crack<br>Propagation in Heterogeneous Materials<br>(p. 22)  |                | H. Trumel An investigation of microcracks-induced thermoelastic softening of a jointed polycrystal by full-field FFT and mean-field homogenizations (p. 41) |
| $14^{30} - 15$ | K. Schladitz Multi-scale analysis,<br>modelling, and simulation of a<br>nano-porous membrane (p. 30)  | J. Willis Variance of stress and strain in a random composite (p. 25)  |                | F. Montheillet Modeling of inhomogeneous self-organized microstructures associated with dynamic recrystallization in metals (p. 42)                         |
| $15 - 15^{30}$ | L. L. Bonilla Formation and growth of blood vessels and characterization of the resulting vascular network by ensemble averaged densities (p. 11) | P. Ponte Castañeda A symmetric fully optimized second-order method for nonlinear homogenization (p. 26)  | Free           | R. A. Lebensohn FFT-based micromechanical modeling of polycrystalline materials with non-linear constitutive behavior and complex microstructures (p. 43)   |
| $15^{30} - 16$ | Coffee Break  |  |                | Coffee Break  |
| $16 - 16^{30}$ | F. Barbe Modelling of polycrystals using well-controlled Voronoi-type tessellations and its applications to micromechanical analyses (p. 12)      | F. WILLOT The effective conductivity of strongly nonlinear 2D random media (p. 27)   | FREE AFTERNOON | G. Cailletaud Oligogranular Materials and Structures (p. 44)  |
| $16^{30} - 17$ | D. Depriester Faithful EBSD-based mesh generation of polycrystaline materials (p. 39)   | S. Berbenni On a consistent discrete<br>Green operator for FFT-based methods to<br>solve heterogeneous problems with<br>eigenstrains and dislocations (p. 38)  | NOC            | D. Kondo Homogenization of ductile (nano)porous materials with pressure-sensitive matrix (p. 27)  |
| $17 - 17^{30}$ | E. CHERKAEV Effective properties of a porous medium and imaging its structure (p. 14)   | POSTER SESSION: <u>F. SEITL</u> (P. 57),<br><u>L. PETRICH</u> (P. 57), <u>F. RABETTE</u> (P. 58),<br><u>F. N'GUYEN</u> (P. 60); <u>É. KAESHAMMER</u><br>(P. 60), <u>A. GUERINE</u> (P. 61), <u>H. TALBOT</u> . |                | C. Soize Design optimization under<br>uncertainties of a mesoscale implant in<br>biological tissues using a probabilistic<br>learning algorithm (p. 47)     |
| Evening        | Addresses: F. Mudr  | y (recording), J. Serra  |                | Banquet   |