

# ACCADEMIA NAZIONALE DEI LINCEI

CENTRO LINCEO INTERDISCIPLINARE "BENIAMINO SEGRE"

in collaborazione con  
Università di Roma "La Sapienza"  
Consiglio Nazionale delle Ricerche  
Istituto Nazionale per la Fisica della Materia

CONVEGNO INTERNAZIONALE

## UNIFYING CONCEPTS IN GLASS PHYSICS

27 FEBBRAIO - 2 MARZO 2002

PROGRAMMA - INVITO

### Mercoledì 27 febbraio

- 8.45 Indirizzi di saluto
- 9.00 M. MEZARD: Lattice Glass Models
- 9.30 C. DASGUPTA: Glass transition in classical fluids in a quenched random potential
- 10.00 G. TARJUS: Fragile glassforming behavior in the relaxation of Coulomb frustrated three-dimensional systems
  - 10.30 Intervallo
- 11.00 S. SASTRY: titolo da definire
- 11.30 M. RUBÍ: Inertial effects and effective temperature in systems outside equilibrium
- 12.00 P. POOLE: Fragile-to-strong crossover and thermodynamic anomalies in SiO<sub>2</sub> and BeF<sub>2</sub>
- 12.30 I. CAMPBELL: Rough landscapes and stretched exponential decay
- 13.00 Poster Session
  
- 14.30 W. GOETZE: Logarithmic relaxation near higher - order glass - transition singularities
- 15.00 K. DAWSON: Blocked states of different lattice glass models, and the MCT transition
- 15.30 P. TARTAGLIA: Phase equilibria and glass transition in colloidal systems with short-ranged attractive interactions
  - 16.00 Intervallo
- 16.30 A. BARRAT: Fluctuation-dissipation ratio for compacting granular media
- 17.00 A. CONIGLIO: Tapping dynamics and equilibrium distribution of the inherent states in glassy systems and granular media
- 17.30 A. SCALA: Energy landscape and fluctuation-dissipation experiments for out-of-equilibrium BKS silica
- 18.00 P. SOLLICH: Fluctuation-dissipation relations in simple non-mean field models

## Giovedì 28 febbraio

- 9.00 P. G. DEBENEDETTI: Thermodynamic of glasses: the Kauzmann paradox revised, energy landscape diversity, and supercooled liquid properties
- 9.30 R. SPEEDY: Thermodynamics of liquids and glasses: what do discs, spheres and ethylbenzene have in common?
- 10.00 S. TORQUATO: Jamming, glasses, and order metrics
  - 10.30 Intervallo
- 11.00 F. W. STARR: Links between structure and dynamics (tentative)
- 11.30 A. HEUER: The dynamics of supercooled liquids as reflected by the properties of its potential energy landscape
- 12.00 T. KEYES: Heterogeneity in rotational dynamics; application to supercooled liquid CS<sub>2</sub>
- 12.30 M. SASAI: Saddle-point picture of supercooled liquids and its application to the slow dynamics of liquid water
- 13.00 Poster Session
- 14.30 T. GRIGERA: The dynamic structure factor of glasses: random matrix approach
- 15.00 V. MARTIN-MAYOR: The vibrational density of states of glasses: random matrix approach
- 15.30 T. ODAGAKI: On the thermodynamic anomaly at the glass transition
  - 16.00 Intervallo
- 16.30 S. FRANZ: Dynamical correlation length in supercooled liquids and glasses
- 17.00 C. GODRECHE: Jamming, freezing and metastable states (tentative)
- 17.30 M. ZANNETTI: Off equilibrium response function in phase ordering systems
- 18.00 L. CUGLIANDOLO: Analytic description of dynamic heterogeneities in glassy systems

## Venerdì 1° marzo

- 9.00 P. G. WOLYNES: Unified classical and quantum theory of structural glasses
- 9.30 F. RICCI-TERSENGHI: Unfrustrated models with a glass transition
- 10.00 W. KRAUTH: Liquid, glass and crystal in two-dimensional hard disks
  - 10.30 Intervallo
- 11.00 D. WALES: Energy landscapes: from glasses to proteins via clusters
- 11.30 G. RUOCCO: Relevant points of the potential energy surface in the dynamics of supercooled liquids
- 12.00 A. CAVAGNA: Inherent structures, instantaneous normal modes, saddles: differences and similarities
- 12.30 P. GALLO: Dynamics of supercooled liquids in restricted geometries
- 13.00 Poster Session
- 14.30 T. FRANOSCH: Structural relaxation of a dumbbell solute
- 15.00 R. SCHILLING: Inertia and reference point-independent dynamics of molecular liquids and glasses
- 15.30 A. FIERRO: From an unconstrained model with quenched interactions to a constrained model with annealed interactions
  - 16.00 Intervallo
- 16.30 G. BIROLI: Dynamical heterogeneity and percolation of random walks
- 17.00 T. SCHROEDER: Dynamical heterogeneity: insights from 4-point correlation functions
- 17.30 W. KOB: The relaxation dynamics of silicate melts
- 18.00 D. LEPORINI: Rotational relaxation in polymer melts

## Sabato 2 marzo

- 9.00 T. NIEUWENHUIZEN: Glassy aspects of non-glassy physics (preliminary)
- 9.30 R. ZECCHINA: Boosting search by rare events
- 10.00 J. KURCHAN: Exporting recent glass-theory developments to dense granular matter
- 10.30 A. PAGNANI: Thermodynamics and ground state properties of disordered RNA models
  - 11.00 Intervallo
- 11.30 P. VERROCCHIO: Experimental results on off equilibrium fluctuations dissipation relations in spin glasses
- 12.00 C. A. ANGELL: "Physical ageing of hyperquenched glasses below  $T_g$ , vs "ageing" of slow "chemical order modes" in liquids above  $T_g$ : hierarchical landscapes
- 12.30 J. L. BARRAT: Nonlinear rheology and effective temperature in a sheared fluid
- 13.00 S. CILIBERTO: Experimental study of the fluctuation-dissipation-relation during an ageing process
- 13.30 Chiusura dei lavori

ROMA - PALAZZINA DELL'AUDITORIO - VIA DELLA LUNGARA, 230