INTERNATIONAL WORKSHOP

ON

# FISSION DYNAMICS OF ATOMIC CLUSTERS AND NUCLEI

## Luso, Portugal, 15-19 May, 2000

***Honorary Patrons***

**Professor Ben Mottelson**
**Professor John A. Wheeler**

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***Speakers and Titles***

John A. Wheeler *Fission kills any nuclear rope, loop or chain*
Julio A. Alonso *participant*
Mikahil Andreev *Search for possible 232Pa isomer*
Henrik Bohr *Stability analysis in a nuclear quark-shell model*
Horazy Belovitzky *The emission of light charged particles from fragments of uranium fission by muons, pions, and protons different energy*
Matthias Brack *Semiclassical analysis of the mass asymmetry in nuclear fission and its relation to quantum chaos*
Cathérine Bréchignac *Experimental situation of Coulombic fission in atomic clusters*
Marten Brenner *Alpha Cluster Structure of the Nuclear Surface*
David M. Brink *Bremsstrahlung in alpha decay*
Nicolae Carjan *Angular momentum induced multifragment fission in the frame of the Los Alamos dynamical finite-range liquid drop model*
Pawel Danielewicz *Neutron-proton correlations near the Coulomb barrier*
Alexander Dyachenko *Light and Heavy Fragments in Fluid Dynamic Model of Heavy Ion Collisions*
John Clark *Statistical Modeling of Nuclear Systematics*
Vladimir Elesin *Decay of small carbon and nitrogen clusters*
Eduard F. Fomushkin *participant*
Peter Fröbrich *Decay channels of hot nuclei and hot clusters*
Francesca Garcias *DTF calculations on the fission of metal clusters* (speaker)
Friedrich Goennenwein *Cold and ternary fission. Cluster aspects in low energy fission*
Walter Greiner *Fission and decay of nuclei and the extension of the periodic system into new dimensions*
Michael Grypeos *Single particle aspects of metal clusters*
Claude Guet *Fission of metallic clusters and microdroplets*
Michael G. Itkis *Dynamics of fission of superheaviers obtained with ions of Ca-48 and Kr-86*
Feodor F. Karpechine *Insight into fission dynamics from exotic systems*
Hans J. Krappe *The diverse manifestations of fission of quantal and classical droplets*
Andrey Kravtsov *The problem of collinear three-body disintegrations*
Shimon Levit *The imaginary time dependent Hartree-Fock theory of spontaneous and induced fission*
F. Bary Malik *A model for particle induced fission*
T. Patrick Martin *Fission of multiply charged metal clusters*
Serban Misicu *Scission Configurations in the Cold Fission*
Manfred Mutterer *Particle Accompanied Fission*
Fernando Nogueira * title to be announced
Alexey A.Ogloblin *Cluster decay of 242Cm and transition between different mechanisms of cluster radioactivity*
Albert Overhauser *Broken Symmetry in Nuclear Matter*
Yuri Oganessian *Fusion fission of massive nuclei*
Jorge M. Pacheco * *Cluster Dynamics; Cluster Decay; Exotic Cluster Emission*
Vitaly Paschkevitch *The Fisson Modes*
Vladimir Perelygin *Search of Superheavy nuclei in Galactic Cosmic Rays*
Krzysztof Pomorski *Coupling of the collective pairing vibrations with the fission mode*
Leonid Ponomarev *Muon induced fusion*
Philippe Quentin *The angular momentum generation in fission fragments*
Akunuri V. Ramayya *Binary and Ternary Fission in 252Cf*
Irwin Reichstein *Fission Calculations Using The Energy Density Formalism*
Valery Rubchenya *Superasymmetric fission*
Aureliu Sandulescu *Nuclear Molecules in Cold Fission*
Karl-Heinz Schmidt *Puzzling results on nuclear shells from the properties of fission channels*
Victor Serov *Neutron halo in fissile nuclei*
Arnie Sierk *Liquid drop approaches*
Andrey V. Solovyov *Adiabatic and non-adiabatic dynamics of the ionic core in the formation of electron excitation widths in metallic clusters*
Eric Suraud *Response of metal clusters to violent excitations*
Svetlana Tretyakova *Experimental study of cluster radioactivity (C to Si)*
Vladimir K. Utyonkov *Synthesis of Superheavy Nuclei in the 48Ca+244Pu reaction*
David Zaretsky *The Mixing of Compound Nucleus States in Strong Laser Fields and Nuclear Reactions*

*Not yet confirmed