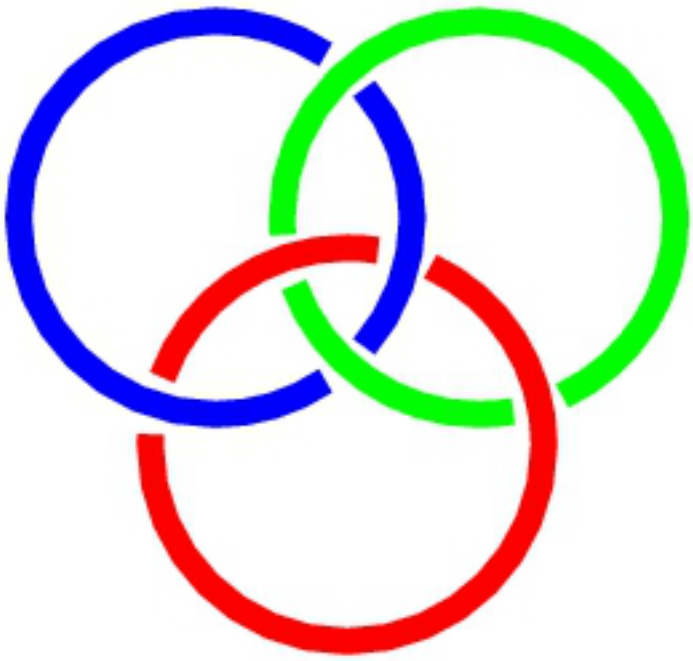
Critical stability



lundi 13 octobre 2008 - vendredi 17 octobre 2008

Ettore Majorama Centre for Scientific Culture

Programme Scientifique

The program will consist of 30' talks, followed by 10' discussion

Speakers and titles

R. Alvarez-Rodriguez, Three-body decays of many-body resonances,

*Edward A.G. Armour (Nottingham), Binding in some few-body systems containing antimatter,

*Paolo Barletta (Pisa), Scattering states of three-body systems with the Hyperspherical Adiabatic method,

*Vladimir Belyaev (Dubna), New nuclear three-body clusters φNN,

*Dario Bressanini (Como), Boundary-condition-determined wave functions,
and their nodal structure, for few-electron atomic systems,

R. Brummelhuisn Relativistic hydrogen atom in strong magnetic fields,

*Georg M. Bruun (Nordita), Feshbach resonances in ultracold atomic gases,

*Arnas Deltuva (Lisbon), Challenges and achievements in the ab-initio three- and four-body scattering calculations: the Coulomb force,

*Jose d'Incao, Few-body physics in ultracold gazes: the role of Efimov physics,

*Pierre Duclos (Toulon and Marseille): Can one bind three electrons with a single proton?

*Martial Ducloy (Paris-13):The physics of long-range atom-surface interactions and its applications,

*Nils Elander (Stockholm):The driven Schrödinger approach to quantum scattering calculations,

*Charlotte Elster (Ohio), Poincaré Invariant Three-Body Scattering,

*Dmitri Fedorov (Aarhus), On the detremination of the parameters of quantum resonances,

*Francesca Ferlaino (Innsbruck), Few-body physics with ultracold Cs atoms and molecules,

*Christian Forssen (Chalmers), The ab initio no-core shell model,

*Tobias Frederico (Soa Paulo, Brazil), Virtual states, halos and resonances in three-body atomic and nuclear systems,

*Avraham Gal (Jerusalem), Few-Body Approaches and Problems in Hypernuclei,

*Edourado Garrido (SCIC, Madrid), Few-body reactions in nuclear astrophysics problem,

*Mario Gattobigio (INLN, France) The Hyperspherical Harmonic method for a A-body system without permutation symmetry,

*Tomas Gonzalez-Lezana (Madrid), Theoretical investigation of the spectra of rotating trimers by means of a variational quantum method based in distributed Gaussian functions,

*Sergy Yu. Grebenshchikov (MPI, Goettingen), Highly excited bound states and near-threshold resonances in ozone isotope effect,

*Dima Gridnev, Behavior of wave functions near the thresholds,

*Alain Joye (Grenoble), A Mathematical Theory for Vibrational Levels Associated with Hydrogen Bonds,

*Robin Kaiser, Multiple scattering of light in cold atoms: from light localisation to plasma physics,

*Oleg Karttavtsev, Consistent α-cluster description of the Hoyle state in 12 C,

*Alejandro Kievsky, Three-body force effects in few-nucleon systems,

*Elena Kolganova (JINR, Russia), Nuclear and molecular scattering processes,

*Pavel Kurasov, How to model p-scattering using point interactions
and related three-body problems,

*Joe Macek (U. Tennessee), Multiparticle interactions of zero-range potentials,

*Miguel Marques (LPC, Caen and GANIL), Light nuclei in the continuum,

*André Martin (CERN), Welcome address,

*Indranil Mazumdar (Tata Institute, India), Efimov Effect in 2-Neutron Halo Nuclei,

*Thomas Neff (GSI), Microscopic Description of Few-Body Systems
in the Fermionic Molecular Dynamics Approach,

*Anna Okopinska (Kielce, Poland), Two-boson correlations in various one-dimensional traps,

Luca Platter (Ohio), Universality in low-energy few-body systems and leading corrections,

*Stephanie Reimann (Lund), Quantum dots and/or Bose-Einstein condensates,

Jean-Marc Richard (Grenoble, France), Proof of stability of tetraquarks
in a minimal-path model of linear confinement,

*Kamal Seth (Northeastern), A journey through exotica in hadronic physics,

*Javier Vijande (Valencia), Four–quark stability,

*Pablo Villareal (Madrid), Spin solvent effects in doped helium clusters:
A microscopic manifestation of superfluidity,

*Michele Viviani (Pisa), Four-body nuclear systems,

M.V. Volkov (Stockholm), Solving the Coulomb scattering problem
without using Coulomb functions,

*Holger Walkens (Groningen), Theory of Classical and Quantum
Reaction Dynamics in Multidimensional Systems,

*Eberrhard Widmann (Vienna), Experimental low energy antiproton physics,

*Slawomir Wycech (Warsaw), Variational calculations for K-few-nucleon systems,

Talks at Critical Stability V (Erice, October 2008)

Here are stored the talks to be given at the Worskhop.