

**10th INTERNATIONAL CONFERENCE
ON
NUCLEAR REACTION MECHANISMS**

**Varenna, Villa Monastero
June 9-13, 2003**

PROVISIONAL PROGRAM

1 - NUCLEON AND NUCLEUS RESPONSE TO HADRONIC AND ELECTROMAGNETIC PROBES.

This Session could include talks on (a) Electron scattering at medium and high energies, (b) Photonuclear reactions with GeV gamma rays, (c) Reactions induced by π and K mesons and protons with momenta from 5 to about one hundred GeV/c, (d) Baryon resonances.

2 - REACTION DYNAMICS IN LIGHT AND HEAVY ION REACTIONS AT LOW, INTERMEDIATE AND RELATIVISTIC ENERGIES.

(a) Microscopic approaches to optical model, (b) Microscopic approaches to level density, (c) Multistep reactions, (d) Nuclear reaction codes, (e) Nuclear reaction mechanisms at high energies, (f) Fusion reactions of nuclei, (g) Transport descriptions of heavy ion reactions, (h) Heavy ion reactions at high and relativistic energies.

3 - NUCLEON CORRELATIONS.

(a) Cluster effects in nuclear structure and reactions, (b) Short and long-range NN correlations, (c) Nucleon coalescence, (d) Intermediate mass fragment production, (e) Nuclear fragmentation, (f) Cluster radioactivity.

4 - RADIOACTIVE BEAMS AND EXOTIC NUCLEI.

(a) Radioactive ion reactions, (b) Entrance channel and isospin effects, (c) large-scale many-body calculations, (d) Radioactive nuclear beams and nuclear astrophysics, (e) Exotic nuclear objects, (f) Hyper nuclei and hyperon physics, (g) Production of antihyperons, (h) Superheavy elements.

5 - NEUTRINOS AND NUCLEI AND NUCLEAR ASTROPHYSICS.

(a) Nuclear reactions by weak probes such as neutrinos and muons, (c) Nuclear reaction calculations for astrophysics, (c) Measurement of cross sections at stellar energies, (d) Neutrino oscillations and the solar neutrino problem.

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