

Introductory Remarks to the Circus Session

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The collision of nuclei under well chosen conditions induces the interaction of two clusters. The survival of the two clusters and the features connected to possible break-up phenomena into e.g. three-body channels, depend strongly on the structure of the nuclei and the relative kinetic energy. The main subject of this session is the dynamics of the nucleus-nucleus system: I) The occurrence of collective resonances in collisions with spherical and deformed nuclei ; II) Coupling of these resonances to the inelastic states of the clusters; III) Occurrence of three-body final channels; IV) Onset of damping; V) Lifetime of the Di-Nuclear complex connected to rotation angle and intrinsic excitation (energy dissipation); VI) Role of valence nucleons.

It seems quite difficult to keep the balance between damping and orbiting, as well as it is for the speakers to stay on the narrow line of the attributed time for their presentation and transmit the relevant information. This is certainly the balance act you may watch in a circus.

The first speakers address mainly the phenomenon of orbiting resonances and their connection to inelastic excitation, whereas the last one deals with the aspects of single particle motion in terms of molecular orbitals.