

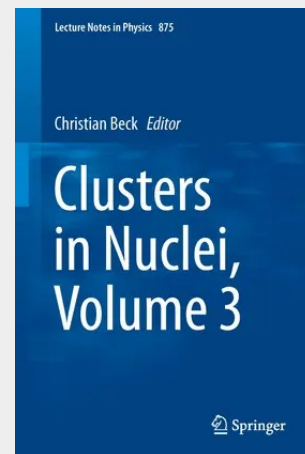
Clusters in Nuclei, Volume 3

Following the pioneering discovery of alpha clustering and of molecular resonances, the field of nuclear clustering is today one of those domains of heavy-ion nuclear physics that faces the greatest challenges, yet also contains the greatest opportunities. After many summer schools and workshops, in particular over the last decade, the community of nuclear molecular physicists has decided to collaborate in producing a comprehensive collection of lectures and tutorial reviews covering the field. This third volume follows the successful Lect. Notes Phys. 818 (Vol. 1) and 848 (Vol. 2), and comprises six extensive lectures covering the following topics:

- Gamma Rays and Molecular Structure
- Faddeev Equation Approach for Three Cluster Nuclear Reactions
- Tomography of the Cluster Structure of Light Nuclei Via Relativistic Dissociation
- Clustering Effects Within the Dinuclear Model : From Light to Hyper-heavy Molecules in Dynamical Mean-field Approach
- Clusterization in Ternary Fission
- Clusters in Light Neutron-rich Isotopes

By promoting new ideas and developments while retaining a pedagogical style of presentation throughout, these lectures will serve as both a reference and an advanced teaching manual for future courses and schools in the fields of nuclear physics and nuclear astrophysics.

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