Shapes and Symmetries in Nuclei: from Experiment to Theory (SSNET'22 Conference)

ID de Contribution: 144 Type: Non spécifié

Alpha-particle distribution in nuclei (remote)

vendredi 3 février 2023 12:10 (20 minutes)

Alpha clustering is a well-known correlation in nuclei. We use the mean-field theory to investigate where in the nucleus and how probable the alpha particles are formed. In addition, the calculation approximately provides information how much the daughter nucleus is excited, when the alpha particle is knocked out. We will discuss effect of the pairing and deformation of the parent nucleus.

Orateur: NAKATSUKASA, Takashi (Tsukuba University)

Classification de Session: Session 16: Alpha clustering, magnetic moments, structure of superheavy

nuclei