## International Conference on Chirality and Wobbling in Atomic Nuclei



ID de Contribution: 32 Type: Non spécifié

## Microscopic investigation of γ-deformation in atomic nuclei

mardi 11 juillet 2023 16:00 (30 minutes)

A comprehensive investigation of  $\gamma$ -deformation observed in atomic nuclei is performed for more than 30 nuclei in different regions of the periodic chart using the microscopic triaxial projected shell model approach. It is demonstrated that apart from signature splitting of the observed g-bands, the quadrupole transitions of these bands are also sensitive to the nature of the  $\gamma$ -deformation. Further, it is shown that mixing of the quasiparticle excitations into the collective vacuum state can transform the system from  $\gamma$ -rigid to that of  $\gamma$ -soft.

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Classification de Session: Session