"Novel basic pictures of nuclear shapes and rotations verified by super-scale shell-model calculations"

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Brief abstract:
In this talk, not only triaxialities but also underlying mechanisms of rotations are unveiled, including two distinctly different modes of ellipsoidal rotation and molecular rotation within a unified quantum mechanical framework. Also, the conservation of the K quantum number is stressed regardless of triaxiality. The conventional picture of nuclear deformation and rotation have thus been superseded with alternative views and formulations which are consistently made and verified by supercomputing as a whole.