

## Do nuclei assume toroidal shapes?

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A recent experiment<sup>\*)</sup> at the Texas A&M University Cyclotron Institute is presented.

The experimental excitation function for the  $7\alpha$  de-excitation of  $^{28}\text{Si}$  nuclei excited to high excitation energies in the collisions of 35 MeV/nucleon  $^{28}\text{Si}$  with  $^{12}\text{C}$  reveals resonance structures.

The possibility that these structures may indicate the population of toroidal high-spin isomers is discussed and the need for further investigations is emphasized.

<sup>\*)</sup>X. G. Cao *et al.*, Examination of evidence for resonances at high excitation energy in the  $7\alpha$  disassembly of  $^{28}\text{Si}$ , Phys. Rev. C **99**, 014606 (2019).