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## TOROIDAL MODE: FROM GIANT RESONANCE TO INDIVIDUAL STATES

Last years the toroidal dipole resonance (TDR) attracts a high attention [1-4]. This mode is located at the energy of the pygmy dipole resonance and is believed to form the low-energy part of the isoscalar giant dipole resonance. The TDR is the only known dipole mode in the family of intrinsic electric excitations. Just TDR perhaps generates the pygmy dipole resonance at the nuclear surface region [3]. Last years, various TDR properties were explored by our group within the self-consistent Skyrme Quasiparticle Random-Phase Approximation (QRPA), see review [4]. However the TDR still has many open problems and even its experimental observation can be disputed [5].

In this connection, we propose a new route to study the toroidal mode: to switch the effort from TDR (embracing many states and masked by other multipole modes) to well-separated low-energy toroidal states. As was recently shown [6], such states can exist in low-energy spectra of light nuclei with a strong axial prolate deformation. For example, in  $^{24}\text{Mg}$ , this state appears as the lowest dipole  $K=1$  excitation. These states can be easier discriminated and identified in experiment than TDR. Being observed, they could serve as excellent test cases to probe various reactions for vortical nuclear excitations. As a first step, we discuss the possibility to observe the toroidal individual states in inelastic electron scattering.

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