



Physics Division Seminar

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Nuclei as Open Quantum Systems

Host: Robert Wiringa

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Marginally bound or unbound quantum systems exhibit generic behaviors stemming from the presence of close-lying reaction and decay channels, and therefore they must be treated in the open quantum system framework. In nuclear physics, studies of exotic nuclei far from the valley of beta stability have revealed phenomena characteristic of open quantum systems, and are at the origin of a new paradigm in low-energy nuclear physics toward the unification of nuclear structure and reactions. In this talk, I will present current theoretical strategies in this area in the context of science drivers of the Facility for Rare Isotope Beams.