## Tuesday, December 1<sup>st</sup> At 3:45 pm – Zoom mtg.

State of the art experiments with Active Target Detectors, developed at Cyclotron Institute

## Abstract:

The new active target detectors: TexAT (Texas Active Target) and two prototypes have been recently developed at Cyclotron Institute. They designed to be used for nuclear structure and nuclear astrophysics experiments with rare isotope beams produced by either MARS recoil separator at CI or the reaccelerated beams facility (i.e. TRIUMF). Detectors provide high efficiency and flexibility for experiments with low intensity exotic beams. They are now in fully operational mode and have been used recently in experiments on resonant elastic scattering of protons and  $\alpha$ -particles, (d,3He)- nucleon-transfer reaction, fusion and b- delayed particle decay spectroscopy studies. The overview of completed and planned experiments will be presented.

Some details of new, upgraded and much more advanced version of Active Target TPC: TeBAT (Texas-Birmingham Active Target) will be discussed. This joint (CI TAMU/U of Birmingham, UK) project is now under development.

CYCLOTRON
COLLOQUIUM
(Zoom Mtg)

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