Tuesday
Sept 24th
At 3:45pm

Measuring Charged Pion Emission from ^{112}Sn + ^{124}Sn and ^{124}Sn + ^{112}Sn Reactions with the SπRIT Time Projection Chamber

Abstract:

The density dependence of the symmetry energy remains an interesting question for nuclear physics and astrophysics. Heavy-ion collisions can be used to probe the symmetry energy at densities exceeding that of normal nuclear matter. The production of charged pions has been predicted to be sensitive to the symmetry energy. A new Time Projection Chamber (TPC), called the SπRIT TPC, was developed to study charged pion production in heavy-ion collisions. In 2016, the SπRIT TPC was used to study 4 combinations of Sn + Sn collisions. A brief motivation will be discussed, along with some details of the SπRIT TPC development. The experimental setup and campaign will be presented, along with analysis of the experimental data for 2 of the 4 beams.

CYCLOTRON COLLOQUIUM

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Dr. Jonathan Barney

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Graduate Assistant

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Michigan State University

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CYCLOTRON INSTITUTE
Room 228

Refreshments will be served at 3:30 pm

TEXAS A&M UNIVERSITY