



# CYCLOTRON INSTITUTE

## TEXAS A & M UNIVERSITY

### 50 Years of Theoretical Nuclear Physics Research at the Cyclotron Institute

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**Abstract:** The scope of theoretical nuclear physics research at the Cyclotron Institute in Texas A&M University has expanded significantly during the past fifty years. Starting with only a few researchers during early years, the number has now grown to seven, including four faculty members of the physics department and three senior research scientists. The area of research has correspondingly expanded from only nuclear structure to also include nuclear reactions, nuclear astrophysics, and relativistic heavy ion collisions. Many of the theoretical research accomplished at the Cyclotron Institute have had major impacts on our understanding of the equation of state of nuclear and neutron matter, properties of hot nuclei, nuclear reaction cross sections relevant to nucleosynthesis, hadron in-medium properties, heavy quark interactions in quark-gluon plasma, and early dynamics of gluon fields in ultrarelativistic heavy ion collisions. These researches have led to the publication of many highly cited papers in theoretical nuclear physics as well as the graduation of many Ph.D. students and the mentoring of many postdoctoral research associates. This talk will review these achievements of the nuclear theory group during the past fifty years.

December 1, 2017

2:00pm

## 50 Years of beam Seminar Series

**Dr. Che-Ming Ko**

Cyclotron Institute and  
Department of Physics and  
Astronomy,  
Texas A&M University

**Cyclotron Institute  
Room 228**

**Refreshments will be served  
at 1:45pm**



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