



# PHYSICS AND ASTRONOMY SEMINAR

**Dr. Marco Pignatary,**  
University of Hull

**“The p-process in stars, in presolar dust and in the solar system”**

Abstract

“The p process is responsible for the production of proton-rich stable nuclei beyond iron. With the exception of Mo and Ru, the solar abundance of these isotopes are one-two orders of magnitude lower than more neutron-rich isotopes belonging to the same elements. The solar composition is the only observable for the chemical evolution of p-process isotopes in the Galaxy.

Observations of single stellar production of these species is limited to presolar grains from core-collapse supernovae, and from radioactive signatures of Nb92 and Sm146 in the early solar system. I will present an overview about p-process nucleosynthesis in stars, and what are the challenges and the open questions that still need to be answered in order to reproduce the observations.”

Thursday, May 2, 2019

11:30 a.m.

Elliott Building – Room 161