東北大学　宇宙創成物理学国際共同大学院プログラム

GP-PU (Graduate Program on Physics for the Universe）Seminar

“The creation of elements”

by Steven Karataglidis (University of Johannesburg)

Time and Date: 15:00-17:00, Oct 11th, 2022

Place: Room 745, Science Complex B H03 (hybrid)

Registration:"https://us02web.zoom.us/meeting/register/tZ0vdeyorTojGdZDxUTGJy334Y3PW8GGRCPe”

Abstract

Life is made of biological cells. Those biological cells are made of chemical compounds. Those chemical compounds are molecules of atoms. Those atoms define the elements. Those elements are from…? When Mendelev wrote down the periodic table for the first time, there was no further consideration as to the building blocks of the elements themselves.

This talk will introduce the work that informs the creation of the elements: how they come about and, more importantly, where. Both nuclear physics and astrophysics play a part. I will introduce the central and crucial contributions nuclear physics has played in this research, and its connection to astrophysics. Not only will I discuss the research itself in this area but also the scientists since Mendelev who have contributed to this understanding.

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