



Science Cafes in South Bend

January 25, 2012

A History of Nuclear Weapons with Dr. Michael Wiescher of the Physics Department, Notre Dame. Nuclear weapons have been a part of life on earth for more than 60 years. They have affected political decisions, military planning, and military costs. They have altered the environment and influenced man's way of life in numerous ways. After summarizing the present interest in nuclear weapons and nuclear proliferation, the presentation will focus on the physics of nuclear materials followed by a description of the technical development and the technical challenges associated with the production of nuclear weapons. The history of the US weapons program and its implications for the ecologic and cultural environment will be discussed. The presentation will end with a summary of long-term issues associated with a military nuclear weapon program.

March 28, 2012

How to Turn Lead into Gold with Dr. Micha Kilburn, Outreach Coordinator for the Joint Institute for Nuclear Astrophysics. Carl Sagan once wrote that "We are made of star stuff." What did he mean by that? How do stars make the "stuff" in our bodies and everything around us? How was the gold in our jewelry made? I will address these questions and more, focusing on how we recreate these stellar conditions in laboratories to better understand the origin of elements. To show how we turn lead into gold (or anything into something smaller) there will be interactive demonstrations.

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<http://www.jinaweb.org/html/events.html>

<http://globes.nd.edu/news-and-upcoming-events/sciencecafe.shtml>