

## National Nuclear Science Week 2013

The outreach team for the Joint Institute for Nuclear Astrophysics (JINA) celebrated National Nuclear Science Week through a variety of events related to nuclear science and physics. It was an unusually busy week for us.

On Monday, Dr. Kilburn, JINA Outreach Coordinator, presented an overview of stellar nucleosynthesis for the [Michiana Astronomical Society](#). Dr. Constan, NSCL Outreach Coordinator, travelled to Everett High School on Monday to guide students through marble nuclei lessons and activities. He returned on Wednesday to meet with the rest of the students, 170 in total. School visits are not only an excellent venue for introducing nuclear science, but also a chance to inform students of our more extensive programs.

On Tuesday & Wednesday, JINA participated in an annual event which brings 8<sup>th</sup> graders from Edison Intermediate School to the University of Notre Dame for a college readiness program and STEM activities. Although we have traditionally led marble nuclei activities, it has not been as well received by the students as the other STEM activities. This year we led a more hands-on activity, focusing on problem solving skills needed by physicists, in which the students made flying fish from household supplies, motors, and batteries.

On Friday, JINA staff met to revise the application for our flagship [PAN Program](#). PAN is a weeklong immersive experience which allows high school students to perform nuclear experiments in a university setting.

Chemistry Day was held at [Impression 5](#) on Saturday with the theme “Energy, Now and Forever.” JINA staff and former PAN students led attendees through activities which focused on stellar fusion (CNO cycle card game), nuclear fission reactors (block/domino chain reactions), and particle detection with both magnetic (“charged”) and non-magnetic (“neutral”) marbles, and iron filings.

	Location	# Participants
Monday	Michiana Astronomical Society, Mishawaka, IN	22
Monday & Wednesday	Everett HS, Lansing, MI	170
Tuesday & Wednesday	Edison Intermediate School, South Bend, IN	25
Saturday	Impression 5, Lansing, MI	100

*JINA Outreach participated in events at four locations during National Nuclear Science Week, reaching over 300 people.*



*Students learn about nuclear physics via magnetic marble model nuclei activities (top). During Chemistry Day, participants learn about nuclear science through the a card game (middle) a model particle detector, and an activity to explore fission in reactors (bottom).*



### Contact Information:

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