Joint Institute for Nuclear Astrophysics

Math, Science, Technology 2014 @ MSU



24 gifted middle-school students enrolled in the JINA Nuclear Astrophysics class during MST 2014. Another 24 were waitlisted for the full course. MST offers a variety of STEM options from which students choose two courses, and one extracurricular activity. Taught by JINA faculty, graduate students, and staff, the two-week course serves as an intensive introduction to nuclear science and career paths. After an introduction to nuclear astrophysics and a tour of NSCL, students participate in interactive lectures on topics such as light, stellar evolution, nucleosynthesis, cosmic rays, and current research at JINA institutions. They also performed experiments with portable cosmic ray detectors to measure the effect of concrete shielding. Students ended the course with a poster session to explain their cosmic ray experiments to peers and parents.

At the end of the course, over 90% of students felt the course gave them a better understanding of what work a science/research career involves, that nuclear research is an important investment, that the instructors were interesting, and enjoyed the course. Over 80% felt the course made them more interested in learning about nuclear astrophysics. Additionally, the number of students planning to major in physics and/or astronomy increased from 9 to 12 during the two week program.

I loved being in a room with competent and intelligent people with a passion for Nuclear science. Zach Constan was so fun to be around! The course was not challenging, and very informative.





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Web Sites: http://gifted.msu.edu/programs/mathscience-and-technology-msu www.nscl.msu.edu http://www.jinaweb.org/