Illinois Mathematics and Science Academy
Great Minds Program®
presents

Chasing Cosmic Bullets:
The Pierre Auger Experiment

featuring

Dr. Angela Olinto

Professor, Department of Astronomy and Astrophysics, and the College; Enrico Fermi Institute; Kavli Institute for Cosmological Physics

The University of Chicago

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at 4:30-5:30 p.m.
IMSA Pearson Lecture Hall

The most energetic particles in the universe are ultra-high energy cosmic rays. Millions of times more powerful than anything produced by man-made accelerators, their origin has been a mystery for about a century. Over the last several years, an international collaboration of 18 countries joined forces to solve this mystery by building the Pierre Auger Observatory. Spread over 3,000 square kilometers in western Argentina, the observatory was recently inaugurated. During its construction, the observatory gathered enough of these rare particles to find the first clues to their origin. The most energetic of these particles tend to point to cosmologically nearby galaxies that host super massive black holes at their centers. Over the next years, scientists working on Auger will be carefully studying these most extreme particles, learning where they come from and what they are made of in order to solve the longstanding mystery of where they come from and how they are accelerated to the highest energies ever observed.