

**What is the Solar System Made Of?
Lessons from Meteorites and Returned Samples from Near-Earth Asteroids.**

Prof Timothy Glotch

Meteorites, and the asteroid parent bodies that they come from are some of the fundamental building blocks of the solar system, including the terrestrial planets. They record the earliest history of the solar system, including the first geologic processes involving water and organic carbon. In this talk, Prof. Glotch will review what we've learned from carbonaceous chondrite meteorites as well as samples returned by two missions to near-Earth asteroids -- the Japanese space agency's (JAXA's) Hayabusa2 mission and NASA's OSIRIS-REx mission. He'll also discuss recent measurements of carbonaceous chondrites and Hayabusa2 samples done in his lab at Stony Brook and at the National Synchrotron Light Source II at Brookhaven National Laboratory.