Carl Sagan famously said, “We are made of starstuff.” Well, of course, so is the rest of the material in the Solar System…but is it all made from the same starstuff? When and where did this starstuff come from? Meteorites provide clues to these types of questions, and through forensic investigation of starstuff “fingerprints” found in meteorites, we can learn an incredible amount about the creation and evolution of the Solar System. This talk will start with the basics of meteoritic investigation, touch on how incredibly important meteorites have been throughout the history of Earth, and finish with an overview of some of the exciting recent chemical and isotopic fingerprints that can tell us about when, where, and how planetary bodies formed in our Solar System.

GREG BRENNECKA
Institut für Planetologie

Dr. Greg Brennecka is currently a Humboldt Fellow at the Institut für Planetologie in Münster, Germany where his group uses isotope geochemistry techniques on meteorite samples to deduce clues about planetary formation and solar system evolution. Dr. Brennecka has degrees in Chemistry from Columbia College, Geology from the University of Missouri, Geochemistry from Oregon State University, and Isotope Geochemistry from Arizona State University. He also spent several years working in the nuclear forensics and isotope signatures group at Lawrence Livermore National Lab. When Greg isn’t peeling back the secrets of the universe by looking at rocks in the lab, he’s pondering the big questions... like how to get someone to fund him to travel the globe looking for rocks.