

Chez Pierre

Presents ...

Monday, October 1, 2018

12:00pm Noon

MIT Room 4-331

Chez Pierre Seminar

Michael Norman, Argonne National Laboratory

“Mineralogy Inspires Physics”

The synthesis of the mineral herbertsmithite has led to a revolution of sorts in the field of quantum magnetism due to the fact that this mineral has spin $\frac{1}{2}$ ions sitting on a frustrated kagome lattice. Novel spin liquid behavior has been suggested for this mineral, as well as a number of its close relatives. But, there are many other interesting minerals out there yet to be synthesized and studied. In this talk, after reviewing the current state of affairs, I will present some interesting candidates that we have found from searching mineralogical databases, and discuss what implications they might have for the field of quantum magnetism.

