Physics Colloquium

Part of the Miller Lecture Series

The Nuclear Physics of Dark Matter Detection

Dr. Wick Haxton

UC Berkeley and LBNL

One of the most important tools for identifying and characterizing dark matter particles is through their scattering off nuclear targets. Such direct detection experiments have traditionally been analyzed under the assumption that the nucleus can be treated as an elementary particle, characterized by a charge and spin. I will describe how the situation is in fact more interesting: there is the possibility of learning much more about dark matter from nuclear experiments, if we employ the requisite number of nuclear targets with distinct "personalities."

Wednesday

January 25

4:00 P.M.

Rm 118 NSH

Refreshments
in Rm 202 NSH
@ 3:30 pm

Notre Dame Science
Department of Physics