

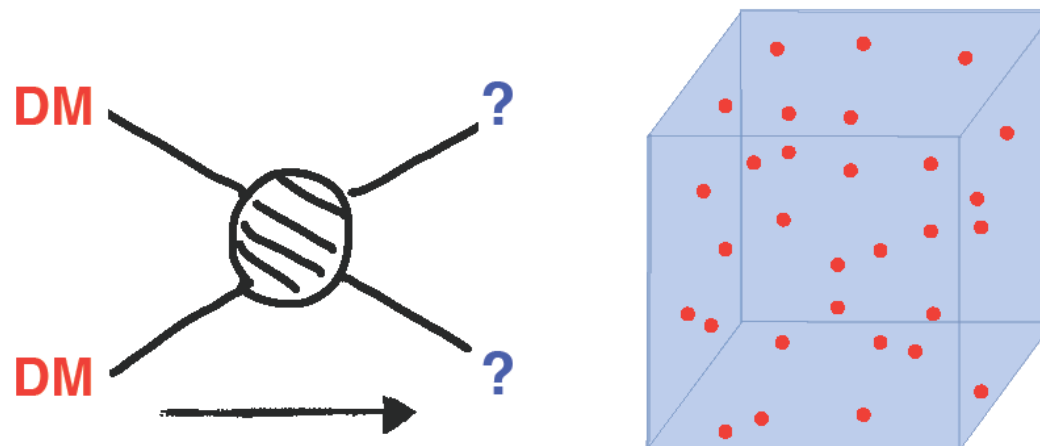


Dark Matter Below the Higgs Scale.

Tuesday, 3 April 2018

DESY Auditorium, 16:45 h

Josh Ruderman (NYU & CERN)



Dark matter is believed to make up most of the matter of our Universe, but its particle origin remains a mystery. A promising possibility is that dark matter is composed of a new particle that was thermally produced in the early Universe, and has a mass near the mass of the recently discovered Higgs boson. As I will review, a diverse set of experiments are now searching for dark matter candidates at the Higgs scale. These experiments have great potential to discover dark matter, but the allowed parameter space is rapidly closing. An alternative possibility, that is receiving growing attention, is that dark matter is thermally produced but has a mass that is significantly lighter than the Higgs boson. I will present an overview of recent theoretical and experimental progress exploring light dark matter candidates.

- **Coffee, tea and cookies will be served at 16:30h**
- **After the colloquium there is a chance for private discussions with the speaker over wine and pretzels**

