

**Abstract:**

We study a class of simplified dark matter models in which one dark matter particle couples with a mediator and a Standard Model fermion. In such models, collider and direct detection searches probe complimentary regions of parameter space. We determine the current experimental constraints on the model parameter space for Dirac fermion, Majorana fermion and complex scalar dark matter cases. We also propose new collider search strategies to improve the current searches for this class of dark matter models.

***\*\*Pizza and drinks will be served after the seminar.\*\****

**Fermion Portal Dark Matter**

**Speaker: Prof. Yang Bai (University of Wisconsin-Madison)**

**Time: 11:00 am, June 13, 2014**

**Place: Room B324**

**Organized by the Experimental Physics Center**

**EPC Seminar**