



Contribution ID: 126

Type: **parallel talk**

## Natural Supersymmetry Constraints from Dark Matter

*Monday 7 May 2012 17:15 (15 minutes)*

### **Abstract:**

This talk examines the theoretical implications of direct dark matter searches on the naturalness of supersymmetry models. Assuming parameters are independent at weak scale and the absence of large accidental cancellations, XENON100 bounds are found to imply fine-tuning at  $\sim 10\%$  level, and XENON1T can probe supersymmetric models down to percent level tuning.

**Authors:** SHAKYA, Bibhushan; PERELSTEIN, Maxim (Cornell)

**Presenter:** SHAKYA, Bibhushan

**Session Classification:** SUSY II

**Track Classification:** Supersymmetry