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SUSY collider and dark matter phenomenology

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I present a brief overview of SUSY phenomenology: where theory intersects with experiment. Three areas are addressed: 1. indirect effects including $g-2$, B-decays, EDMs; 2. dark matter signatures featuring thermally produced WIMPs and non-thermal SUSY dark matter including axions and light moduli; and 3. collider signatures featuring standard LHC searches which then confront the naturalness issue.

I explain how older conventional measures overestimated SUSY finetuning and show that plenty of natural parameter space is left to explore.

The advent of the string landscape percolated slowly into SUSY phenomenology, but now rather general arguments suggest a landscape draw to large soft terms modulated by requiring a derived weak scale in each viable pocket universe be not too far from our measured value so that atoms and complexity can arise. This stringy naturalness then predicts $m(h) \sim 125$ GeV with sparticles largely beyond present LHC reach.

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