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Sorting Category:

Large Extra Dimensions and Grand Unification at the Electroweak Scale MARCO SPRINGMANN, Stony Brook University, Stony Brook, NY — Why is gravity so exceptionally weak compared to the other forces? This major question known as the hierachy problem is claimed to be solved by a number of recent theoretical models. In my talk I will present two such models, the ADD and the RS model. Both of them introduce extra dimensions to solve the problem. After depicting the theoretical ideas I give an overview on the experimental constraints already been put on the size of the extra dimensions. This includes a review of gravitational experiments at the sub-milimeter scale and collider experiments performed at the Tevatron and LEP. I will close the talk with an outlook on the possibilities of detecting them with future collider experiments like the LHC.

References:

1. Lisa Randall, "*Warped Passages*", Harper Perennial, 2006.

[X] Prefer Oral Session
[ ] Prefer Poster Session

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