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Type: **Parallel talk**

GUT inspired SUSY scenarios: Dark Matter versus LHC searches.

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We expand the GUT scenarios studied in in arXiv:1511.06205 with an analysis of the Pati-Salam (PS) group. The new SUSY scenarios that can be directly compared with our previous SO(10) analysis. Regarding neutralino relic density, the PS group can fit WMAP bounds in areas where gluinos and stops can coannihilate with the neutralino. We also investigate whether the models can predict a significant SUSY contribution to the muon $g-2$. We find that future LHC searches are able to constrain the different SUSY GUT scenarios in a complementary way with dark matter searches. This work is mainly based in work in preparation following a similar scheme as arXiv:1511.06205, including the new CMS updates on the searches of SUSY particles.

Presentation type

Parallel talk

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