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LHC constraints on the minimal Dirac gaugino model.

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Most SUSY searches at the LHC are optimised for the MSSM, where gauginos are Majorana particles. By introducing Dirac gauginos, we obtain an enriched phenomenology, from which considerable differences in the LHC signatures and limits are expected as compared to the MSSM. Concretely, in the minimal Dirac gaugino model (MDGSSM) we have six neutralino and three chargino states. Moreover, production cross sections are enhanced for gluinos, while for squarks they are suppressed. In this talk, we explore the consequences for the current LHC limits on gluinos and squarks. This is based on the recent paper arXiv:1812.09293. We also comment on ongoing work regarding electroweak-ino phenomenology in the MDGSSM.

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