Bound-state effects on gluino-pair production

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We study bound-state effects on the pair production of gluinos at hadron colliders, in a context of the minimal supersymmetric extension of the standard model. Due to the expected large mass and the octet color-charge of gluinos, the bound-state effects can be substantial at the LHC. We find significant deformation of the invariant-mass distributions of a gluino-pair near the mass threshold, as well as an additional correction to the total cross-section.

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