

# Global-fit constraints in the MSSM and scalar singlet dark matter models with GAMBIT

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As above

## Summary

GAMBIT is a new public Beyond-the-Standard-Model global fitting code, based on modular design principles, generic calculations, automation, and with a goal of continual expansion to include ever-more models, constraints, and sampling algorithms. In this first round of results from the project we present updates of constraints in several MSSM-based models as well as the scalar singlet dark matter model. Constraints include a variety of dark matter observables (relic density, direct + indirect detection), collider observables (inc. Higgs + SUSY searches for ATLAS, CMS, and LEP), flavour physics (inc.  $g-2$ ,  $b \rightarrow s \gamma$ , B decays, LHCb likelihoods), and precision electroweak tests (such as W mass,  $\Delta\rho$ ).

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