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## **MSSM4G: Reviving Bino Dark Matter with Vector-like 4th Generation Particles**

*Tuesday 10 May 2016 17:45 (15 minutes)*

We supplement the minimal supersymmetric standard model (MSSM) with vector-like copies of standard model particles. Such 4th generation fields can simultaneously increase the Bino mass without overclosing the universe, achieve the right Higgs mass with more natural superpartner masses and preserve gauge coupling unification. We verify that the model is safe from current bounds and discuss future sensitivity through collider searches and dark matter direct and indirect detection experiments.

### **Summary**

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