## Baryogenesis from the Decays of Exotic Vector-like Squarks

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We show that the baryon asymmetry of the universe can be realized via the out-of-equilibrium decays of TeV scale exotic vector-like squarks. Since baryon number and CP violation will occur in the superpotential, this mechanism is relatively insensitive to the structure of supersymmetry breaking. Examination of the cosmology will lead to restrictions on the reheat temperature of the universe due to tree-level washout processes. We will discuss various phenomenological constraints on the model and potential signals for future experiments including predictions for the LHC. A variation on the TeV scale model allows the exotic squarks to be the messengers of gauge mediated supersymmetry breaking, yielding an overlapping solution to the messenger decay and baryogenesis problems implicit in this class of models.

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