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## Non-universal, Non-anomalous $U(1)'$ in a Model with Anomaly-Mediated SUSY Breaking

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We propose a Minimal Supersymmetric Standard Model combined with a non-universal, non-anomalous  $U(1)'$  symmetry. All anomalies are cancelled in the model without any exotic fields other than the three right-handed neutrinos which are needed to generate neutrino masses. The D-term associated with the  $U(1)'$  gives rise to additional contributions to the slepton masses, rendering all slepton masses positive thus solving the slepton mass problem which generically is present in models with anomaly-mediated SUSY breaking. In addition to accommodating all SM fermion mass hierarchy, the  $U(1)'$  charges of the matter fields also dictate the flavor structure in the soft SUSY sector, leading to predictions for various flavor violating processes. The  $U(1)'$  charges of the superfields also automatically suppress baryon number violating operators.

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