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Novel Quark Dark Matter from Broken Twin Color

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The twin Higgs framework offers an explanation of the little hierarchy problem while remaining consistent with the bounds on new colored states. This scenario also offers a concrete model of richly varied hidden sectors. Typically, the twin sector includes a $SU(3)$ confining force which binds the twin quarks into hadrons. I outline how twin color can be spontaneously broken. In this case the component of the quark fields along the direction of twin color breaking can become an asymmetric dark matter candidate. I explain how this dark matter can be produced through the same mechanism as the standard model baryons and the resulting phenomenology.

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