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Constraints on a Minimal Flavor Violating Sector from Electroweak Precision Data CHRISTOPHER W. MURPHY, UCSD — We examine the electroweak physics of a new physics sector that is symmetric under the Standard Model quark flavor group, $G_F = SU(3)_Q \times SU(3)_U \times SU(3)_D$. Constraints on vector boson representations of this sector are analyzed using their contributions to the self-energies of the EW gauge bosons. Vector masses close to the electroweak symmetry breaking scale are found to be consistent with precision data in almost all of the allowed representations, and in certain cases an EWSB scale mass is possible in a large region of parameter space.

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