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Magnetic Charge, the Dirac String and Photon Mass DOUGLAS SINGLETON, MICHAEL DUNIA, California State University, Fresno, TIMOTHY EVAN, Merced College — Dirac's model of magnetic charge requires a vector potential which is singular along a string that runs from the magnetic charge off to infinity. This string is argued to be unphysical since one can make its effects apparently vanish by imposing the Dirac quantization condition on the product of electric and magnetic charge. In this talk we present recent work that shows the Dirac string may be more physical than originally thought both in the context of a massive photon and even in the limit when the photon mass is zero.

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