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**Hannah R. Schwartz\*** (hs25@princeton.edu). *Isotopy vs. homotopy for disks with a common dual.*

Recent work of both Gabai and Schneiderman-Teichner on the smooth isotopy of homotopic surfaces with a common dual has reinvigorated the study of concordance invariants defined by Freedman and Quinn in the 90's, along with homotopy theoretic invariants of Dax from the 70's. We will show that in any smooth 4-manifold with boundary, pairs of homotopic properly embedded disks with a common dual are isotopic if and only if the 'Dax invariant' of the pair vanishes. (Received August 27, 2020)