1157-57-142 Rhea Palak Bakshi\* (rhea\_palak@gwu.edu), Dionne Ibarra, Gabriel Montoya-Vega, Józef H. Przytycki and Deborah Weeks. Framing Changes of Knots and Links in 3-Manifolds.

We show that the only way of changing the framing of a knot or a link by ambient isotopy in an oriented 3-manifold is when the manifold admits a properly embedded non-separating  $S^2$ . This change of framing is given by the Dirac trick, also known as the light bulb trick or belt trick. The main tools we use are based on McCullough's work on the mapping class groups of 3-manifolds and Dehn homeomorphisms. (Received January 24, 2020)