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John T. Anderson, Purvi Gupta* (purvi.gupta@rutgers.edu) and **Edgar L. Stout.** *The rational hull of Rudin's Klein bottle.*

In 1981, Rudin constructed an explicit embedding of the Klein bottle into \mathbb{C}^2 as an example of a totally real nonorientable surface in \mathbb{C}^2 . That no totally real Klein bottle can be rationally convex in \mathbb{C}^2 was settled much later by Shevchishin. In this talk, we will discuss a technique of computing rational hulls of certain surfaces, which can be applied to Rudin's Klein bottle. This example allows us to answer a natural question regarding the dimension of rational hulls. We will also present a characterization of the rational uniform algebra on Rudin's Klein bottle. (Received September 01, 2018)