

1073-54-54

**Thomas W Kephart\*** (tom.kephart@gmail.com), Physics Department, Vanderbilt University, Nashville, TN 37235, and **Philipp Leser** and **Heinrich Päs**. *Knotted strings and leptonic flavor structure*.

Tight knots and links arising in the infrared limit of string theories may provide an interesting alternative to flavor symmetries for explaining the observed flavor patterns in the leptonic sector. As an example we consider a type I seesaw model where the Majorana mass structure is based on the discrete length spectrum of tight knots and links. It is shown that such a model is able to provide an excellent fit to current neutrino data and that it predicts a normal neutrino mass hierarchy as well as a small mixing angle  $\theta_{13}$ . (Received July 23, 2011)