Abstract Submitted for the TS4CF08 Meeting of The American Physical Society

Dark Matter in the Left-Right Twin Higgs Model ETHAN DOLLE, SHUFANG SU, University of Arizona — In the left-right twin Higgs model, one of the neutral Higgses is a natural candidate for WIMP dark matter. We analyzed the dark matter relic density in this framework and identified regions of parameter space that provide the right amount of dark matter. We also studied the dark matter in the more general inert Higgs doublet model in which the mass splittings between the dark matter and other particles do not follow the relations in the left-right twin Higgs model.

Ethan Dolle University of Arizona

Date submitted: 12 Sep 2008 Electronic form version 1.4