

Abstract

After a brief excursion into dark matter-land, I will talk about the effects of dark matter on stars, as they pass through the distribution of dark matter known to fill the Milky Way. I will focus on the effects of heat conduction by weakly interacting particles, which may help solve the solar abundance problem, a > 6 -sigma discrepancy between the predicted and observed structure of the Sun in the Standard Solar Model, which has confounded solar physicists for over a decade. I will discuss other effects of dark matter on stars, as well as complementary probes from laboratory experiments.