1051-22-247   **Jennifer Daniel*** (`jennifer.daniel@lamar.edu`) and **Daniel Gagliardi**. *Weight lattices of real reductive symmetric spaces.*

The fine structure of a local real reductive symmetric space can be realized as a complex reductive Lie algebra with a pair of commuting involutions. In this paper, we explore the relationship between the weight space of the symmetric space and projected weight space of the associated Lie algebra. For each case, we show that these two spaces are equal and provide formulas for the weights of each in terms of the other. (Received August 25, 2009)