Ruth Haas* (rhaas@email.smith.edu), Department of Mathematics and Statistics, Smith College, Northampton, MA 01063. The Combinatorics of Involutions and Twisted Involutions in Weyl groups.

The set of involutions of a Weyl Group can be generated starting from the identity giving a poset. This poset is similar to the weak order poset for the whole Weyl group, whose combinatorics is important in representation theory and has been studied extensively by many mathematicians. The combinatorics of the involution poset is also of fundamental significance in the study of symmetric spaces and their representations. This talk will focus on the combinatorics of this poset. (Received September 19, 2007)