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**Robyn Brooks, Derek Habermas** and **Karol Koziol\*** (karolkoziol@nyu.edu), 245 Tennyson Ave, Syracuse, NY 13204, and **Kirsten Trickey**. *Decompositions of Various Compact Symmetric Spaces*.

Cartan demonstrated that it is possible to embed a symmetric space isometrically into a Lie group. Thus, by intersecting the image of a symmetric space with the Birkhoff decomposition of the Lie group, we arrive at a decomposition of the space into levels, indexed by elements of the Weyl group. We examine this decomposition for various compact symmetric spaces, and provide criteria for the existence of non-empty levels. (Received September 15, 2008)