

Dynkin Diagrams and Semisimple Symmetric Spaces

Meng-Kiat Chuah

*Department of Applied Mathematics
National Chiao Tung University
TAIWAN*

chuah@math.nctu.edu.tw

Abstract — A semisimple symmetric space is a semisimple Lie group quotient by the fixed points of an involution. These spaces are classified by Berger. Locally, they correspond to a pair of commuting involutions on a semisimple Lie algebra. We attempt to use some markings on the Dynkin diagrams to reveal these commuting involutions, thereby providing another method to characterize the semisimple symmetric spaces.
