A Characterization of Root Lattices

Dayanand S. Rajan
DCS Inc.
Yardley, PA 19067

Anil M. Shende
(email: shende@bucknell.edu)
Dept. of Computer Science
Bucknell University
Lewisburg, PA 17837

Abstract

In this note we show that root lattices are all and only those lattices in which the set of minimal length vectors equals the set of relevant vectors.