

1070-20-163

Matthew J. Dyer* (dyer.1@nd.edu), Department of Mathematics, 255 Hurley Building,
University of Notre Dame, South Bend, IN 46614. *Groupoids with root systems*. Preliminary
report.

Properties of a class of groupoids with (abstract) root systems will be discussed. Examples arise naturally from Coxeter groups, Coxeter groupoids and real simplicial hyperplane arrangements, for example. Their properties include notably that they form a closed class under a basic construction not previously known in general in the examples. (Received February 08, 2011)