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Jonathan D.H. Smith* (jdsmith@iastate.edu), Department of Mathematics, 396 Carver Hall, Iowa State University, Ames, IA 50011-2064. *Linear hyperquasigroups and group representations*. Preliminary report.

The theory of quasigroups has a duality (left/right) symmetry, and linear quasigroups are equivalent to representations of 2-generated groups. Recently, the concept of a hyperquasigroup was introduced to provide a more symmetrical version of quasigroup theory, carrying a triality symmetry. In this talk, linear hyperquasigroups are shown to be equivalent to general group representations. (Received August 05, 2010)