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Hypergroups and their maximum subgroup

A hypergroup is a probability preserving measure algebra with certain additional properties so that it resembles the measure algebra of a topological group; examples include the algebra of bi-invariant measures on a group; other examples arise in connection with product formulas for special functions. Every hypergroup contains a maximal topological subgroup in a natural way.
The purpose of this article is to show how homomorphisms, idempotents, and Sidon sets of a compact commutative hypergroup can often be described in terms of those of the maximum subgroup.
Examples are provided.