

The Howson property for one-sided ideals of semigroups

Scott Carson, George Mason University, Fairfax, VA – 22030

Abstract

A group exhibits the *Howson property* if the intersection of any two finitely-generated subgroups is itself finitely-generated. This is a *finitary condition* for groups: any finite group will satisfy this property. Finitary conditions, including the Howson property, have been well-studied for other classes of algebras (notably for rings and (free) inverse semigroups). We say a semigroup S is *right ideal Howson* if the intersection of $xS^1 \cap yS^1$ is finitely generated for any $x, y \in S$. We define *left ideal Howson* dually. In this talk, I will be discussing (right) ideal Howson semigroups with a particular emphasis on semigroups of idempotents. This is part of joint work completed with my Ph.D. Supervisor, Prof. Victoria Gould, at the University of York.

Keywords: Howson property, semigroup, idempotents.