Monoidal Intervals on Finite Sets

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Let A be a finite set. A set of finitary operations on A is called a clone if it is closed under composition and it contains all projections. The structure of the lattice of all clones on $\{0, 1, 2\}$ is still unknown. Let M be a transformation monoid on A. Then the collection of all clones on A whose set of unary operations coincides with M form an interval in the lattice of all clones on A. There are still open problems about these intervals, even in the 3-element case. We are mainly working on three-element sets, and we will present new families of finite monoidal intervals.

This is a joint work with Miklós Dormán.

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