

Abstract submitted for Thirty-Third Annual Victorian Algebra Conference

Title: The mod- m diagram monoids.

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Given a positive integer m , the (planar) mod- m diagram monoid consists of diagrams from the (planar) partition monoids such that the number of upper and lower vertices contained in each block are congruent modulo m . A presentation by way of generators and relations has previously been established for the mod- m monoid. This talk will outline how the author identified and established generators for the planar mod- m diagram monoid, along with relations that appear to form a presentation of the planar mod-2 diagram monoid, while also describing some of the other results contained in the author's thesis.