

DISTINGUISHING GENERIC AND NON-GENERIC TROPICAL ORIENTED MATROIDS

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Abstract

Tropical oriented matroids were introduced by Federico Ardila and Mike Develin. Their paper establishes ties between tropical hyperplane arrangements and tropical oriented matroids, much like those between standard hyperplane arrangements and traditional matroids. More recently, Silke Horn solidified the analogy by proving the Tropical Representation Theorem. This paper focuses on distinctions between the generic and non-generic cases for both classes of objects, differences which were not highlighted in previous work.

Keywords and phrases: oriented and non-oriented matroids, hyperplane arrangements.

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