

1138-05-69

**Ada Nicole Morse\*** ([ada.morse@uvm.edu](mailto:ada.morse@uvm.edu)), Burlington, VT 05401. *Interlacement and Activities in Delta-Matroids.*

We generalize theories of graph, matroid, and ribbon-graph activities to delta-matroids. As a result, we obtain an activities based feasible-set expansion for a transition polynomial of delta-matroids defined by Brijder and Hoogeboom. This result yields feasible-set expansions for the two-variable Bollobás-Riordan and interlace polynomials of a delta-matroid. In the former case, the expansion obtained directly generalizes the activities expansions of the Tutte polynomial of graphs and matroids. (Received January 29, 2018)