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Cluster Modular Groups of Braid Varieties

Braid varieties are a family of cluster varieties that arise naturally from the study of Legendrian links and their exact Lagrangian fillings. They encompass several known families of cluster varieties, including positroid varieties, double Bott-Samelson varieties, and open Richardson varieties. The symplectic-geometric origins of braid varieties lead to a combinatorial interpretation of clusters as weaves – colored graphs satisfying certain properties. In this talk I will discuss how to use these combinatorics to describe cluster modular groups in various known and conjectural cases, including in the case of Grassmannians and some of their foldings.