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**Michael Hermele** and **Marvin Qi\*** (marvin.qi@colorado.edu). *Higher form symmetry, topological order, and fractons.*

Global symmetries and their spontaneous breaking provide a powerful framework for understanding and classifying phases of matter. It has been realized in recent years that certain classes of topological phases fall under this framework for a generalization of global symmetry known as higher form symmetry. Motivated by this, we study the role that higher form symmetry plays in the context of fracton phases of matter, which share some qualitative features with topological phases but cannot be described by traditional TQFT. We find the symmetry of the paradigmatic fracton model to be a quotient of the one-form symmetry group. The breaking of this symmetry characterizes the fracton phase of the model. (Received September 17, 2019)