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Eric Berry, Daniel Berwick-Evans, Emily Cliff, Laura Wells Murray* (lwells@nd.edu),
Apurva Nakade, Emma Phillips and Robert Joseph Rennie. 2-groups and bundles on the moduli space of elliptic curves. Preliminary report.

In this talk we will introduce the notion of 2-groups, a categorification of groups, and define 2-group bundles. Specifically looking at 2-group \mathcal{G} coming from an ordinary group G, we consider \mathcal{G} -bundles on elliptic curves, and construct a U(1)bundle on the moduli stack of principal G-bundles on elliptic curves. We compare our construction to the classical construction via transgression methods. (Received September 17, 2019)