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Wade Bloomquist*, wbloomquist3@gatech.edu, and **Thang Le** and **Hiroaki Karuo**. *The quantum trace for LRY skein algebras*.

The skein algebra of a surface can be described by local relations for the multicurves on that surface. This has been generalized to allow for arcs on marked surfaces in the Roger-Yang skein algebras, and for stated arcs on punctured bordered surfaces in stated skein algebras. We introduce an extension combining these two generalizations, called the LRY skein algebras, for marked punctured bordered surfaces. We will explore some of the algebraic properties of these new algebras while keeping an eye towards both applications in topology and lessons that can be brought back to previously studied skein algebras. (Received September 21, 2021)