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Brendan Kelly* (kelly@math.harvard.edu), 1 Oxford Street, SC 422, Cambridge, MA 02138, and **Emina Alibegovic, Rebecca Noonan-Heale, Anna Schoening** and **Amanda Cangelosi**. *Shortening Pathways to Completing Calculus*. Preliminary report.

Across the country, calculus requirements act as a gatekeeper to many STEM disciplines. STEM persistence is a multifaceted complex issue that interfaces with critical issues of social justice and national economic competitiveness, requiring our immediate attention. A recent strategy in higher education is to attend to the basic observation: the more college math courses a student has to take before enrolling in their first calculus class, the less likely the student is to complete their calculus requirements. This observation leads us to the following question: How can we change this paradigm and build a sequence of entry-level courses that promotes productive mathematical practices, encourages ambitious interactive instruction, highlights mathematics as a sense-making tool that explains the world in which we live, better serves students, and shortens our students' pathways to completing calculus? Today we are excited to share an open source curriculum that makes progress on this difficult question. This session will focus on the ways in which the new curriculum builds a mathematical story, satisfies students' intellectual needs, and supports ambitious instruction. (Received September 18, 2019)