Josiah E. Thornton* (jthornto@uoregon.edu), Department of Mathematics, University of Oregon, Eugene, OR 97403. Classification of braided near-group categories.

A near-group category is a semisimple, rigid tensor category with finitely many simple objects (up to isomorphism) such that all but one of the simple objects is invertible. In other words it is a fusion category with one non-invertible simple object. If a near-group category admits a braiding, then we call it a braided near-group category. I will discuss the classification of braided near-group categories, completing the work done by J. Siehler. There are two families of braided near-group categories, Tambara-Yamagami (due to Siehler) and symmetric, and seven exceptional categories. (Received September 20, 2011)