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Justin Lanier* (jlanier8@gatech.edu) and **Dan Margalit**. *Normal generators for mapping class groups are abundant*. Preliminary report.

Under what conditions do a group element and all of its conjugates form a generating set for the ambient group? Such an element is called a normal generator. For mapping class groups of surfaces, we give a number of geometric criteria that ensure that a mapping class is a normal generator. With these criteria in hand, we show that every nontrivial periodic element in a mapping class group (except for a hyperelliptic involution) is a normal generator. We also show that if the stretch factor of a pseudo-Anosov mapping class is sufficiently small, then it is a normal generator. Our pseudo-Anosov examples answer a question of Darren Long from 1986. This is joint work with Dan Margalit. (Received February 10, 2018)