Hannah Turner* (hannahturner@math.utexas.edu) and Diana Hubbard. Fractional Dehn twists and left-orders. Preliminary report.

Three-manifolds admit descriptions called open book decompositions; in this setting a surface with boundary and a mapping class describe the 3-manifold. One invariant of an open book is the fractional Dehn twist coefficient (FDTC). The FDTC is a rational number invariant of a mapping class of a surface with boundary, and has connections to contact topology. I'll show that the FDTC of a given surface can be computed using geometrically defined left-orders on the mapping class group. This is joint work with Diana Hubbard. (Received August 10, 2021)