Adam Clay* (adam.clay@umanitoba.ca), Tyrone Ghaswala and Jason Bell. The L-space conjecture, left-orderability and circular orderability of fundamental groups.

The L-space conjecture posits a relationship between the Heegaard-Floer homology of a 3-manifold, whether or not the manifold supports a coorientable taut foliation, and left-orderability of its fundamental group. Motivated by this conjecture, my talk will focus on the third of these three, that is, on left-orderability of the fundamental groups of 3-manifolds and on a generalization of left-orderability known as circular-orderability. It happens that the generalized notion of circular-orderability often arises more naturally in this setting, and recent advances in left-ordering fundamental groups mostly tend to rely on a cohomological analysis in order to pass from circular to left-orderings. This talk will outline some of the classical techniques for doing this, as well as a few new ones. This is joint work with Jason Bell and Tyrone Ghaswala. (Received August 04, 2020)