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Tiansi Li* (litiansi@wustl.edu). *CL-Shellable posets with no EL-shellings.*

Lexicographic shellability is defined and studied by Björner and Wachs as a way to compute the homology groups of shellable posets by either labeling edges (for EL-shellable posets) or labeling pairs of edges and maximal chains (for CL-shellable posets) in the Hasse diagrams. In this talk, I will first introduce the definition of EL-shellability and CL-shellability along with some examples, and how one can compute the homology groups of an EL-shellable poset given an EL-shelling. Then I will present two examples of CL-shellable posets that are not EL-shellable, which answers the question posed by Björner and Wachs' that EL-shellability and CL-shellability are not equivalent for both graded and ungraded posets. (Received September 06, 2019)