1135-05-2380 **Helene Barcelo*** (hbarcelo@msri.org), **Curtis Greene**, **Abdul Salam Jarrah** and **Volkmar Welker**. *Discrete cubical homology groups.* Preliminary report.

Discrete cubical homotopy theory is a (refined) discrete analogue of homotopy theory, associating a (bigraded) sequence of groups to a simplicial complex, capturing some of its combinatorial and topological structure. It can be defined for graphs, resulting in algebraic invariants that differ substantially from the classical homotopy groups. One can also define discrete cubical homology groups in analogy to the continuous case. We will review these notions for graphs and compare them to the classical groups as well as to the recently defined notion of path homology of graphs (Grigor'yan et al). (Received September 26, 2017)