1154-68-1742 **Benjamin Rossman***, Bahen Centre for Information Technology, Room 6214, Toronto, ON M5S2E4, Canada. *Choiceless Polynomial Time.*

The choiceless computation model of Blass, Gurevich and Shelah (1999, 2022) is an algorithmic framework for computing isomorphism-invariant properties of unordered structures. Machines in this model have the power of parallel execution, but lack the ability to make arbitrary choices. For example, a choiceless algorithm cannot freely select an arbitrary neighbor of a vertex in an unordered graph, but may execute a subroutine in parallel over all neighbors. In this talk, I will give an overview of results in the choiceless model and discuss the intriguing open question whether every polynomial-time graph property admits a choiceless poly-time algorithm. (Received September 16, 2019)