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**Jay Yang\*** ([yangj306@mcmaster.ca](mailto:yangj306@mcmaster.ca)). *Virtually Cohen-Macaulay Ideals.*

Virtual resolutions as introduced by Berkesch, Erman, and Smith are free complexes for ideals in the Cox ring of a toric variety which can be simpler and more geometrically meaningful than the minimal free resolution. With such resolutions one can consider the notion of a virtually Cohen-Macaulay module. In recent work with Christine Berkesch, Patricia Klein, and Micheal C. Loper, we explored combinatorial and homological techniques for giving virtually Cohen-Macaulay modules, including giving certain virtually Cohen-Macaulay Stanley-Reisner ideals. (Received September 20, 2021)