1102-13-264 **Mathias Lederer** and **Jenna Rajchgot*** (rajchgot@umich.edu), Department of Mathematics, University of Michigan, Ann Arbor, MI 48109. *The "T-complex" of a Hilbert scheme.*

A Grothendieck Hilbert scheme parametrizes ideals with a given Hilbert polynomial. It carries a natural torus action, and the T-graph of a Hilbert scheme records the data of the zero and one-dimensional torus orbits. Algorithms are known for computing the schemes representing the edges of the graph (due to Altmann and Sturmfels), and combinatorial necessary conditions are known for the existence of an edge connecting two particular vertices (eg. due to Hering and Maclagan).

After reviewing this story, I will offer possible definitions of a "T-complex" which records the data of higher dimensional torus orbits, and will discuss some results about the T-complex in analogy with known results about the T-graph.

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