Emilie B Wiesner* (ewiesner@ithaca.edu) and Matthew Ondrus. Automorphisms, derivations, and subalgebras of the insertion-elimination algebra.

The insertion-elimination algebra is a Lie algebra that can be realized in terms of inserting and eliminating operations on the set of rooted trees. It arises in mathematical physics and shares interesting features with the Virasoro algebra. In this talk, I’ll present, joint with Matthew Ondrus, our work on some fundamental results on the insertion-elimination algebra and how they compare to the Virasoro algebra. These results will include descriptions of the automorphism group, derivations, and finite-dimensional subalgebras. (Received August 30, 2016)