1167-16-168 **Rachael Boyd***, rachaelboyd@mpim-bonn.mpg.de, and **Richard Hepworth**. *Combinatorics of injective words for Temperley-Lieb algebras.*

This talk will introduce combinatorial properties of the 'complex of planar injective words', a chain complex of modules over the Temperley-Lieb algebra that arose in joint work with Hepworth on homological stability. Despite being a linear rather than a discrete object, this chain complex nevertheless exhibits interesting combinatorial properties. I will introduce the Temperley-Lieb algebras and the complex, before stating our trio of results, inspired by results of Reiner and Webb for the complex of injective words. Our results can be viewed as an interpretation of the n-th Fine number as the 'planar' or 'Dyck path' analogue of the number of derangements of n letters. (Received March 05, 2021)