



## EvoLunch

# Transposable elements and selection for recombination

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**Host: Nick Barton**

Transposable elements (TEs) are ubiquitous among eukaryotes, constituting an important fraction of the genome of most species. TE insertion is believed to be generally neutral or deleterious, due to the disruption of gene function or regulatory sequence, or to the possibility of ectopic recombination leading to chromosomal rearrangements. This load of TEs may have important consequences on various evolutionary processes, including the evolution of recombination. Using a combination of analytical and simulation results, I will show that the transposition process generates an excess variance (positive linkage disequilibria) in the number of TEs per genome even in the presence of negative epistasis (that may stem from the possibility of ectopic recombination). While this excess variance remains small in randomly mating populations, it may become important as the rate of sex or outcrossing decreases. Consequences for the evolution of recombination will be discussed.

**Thursday, December 12, 2019 12:30pm - 01:30pm**

IST Austria Campus Mondi Seminar Room 1, Central Building



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.