

Many Cheerful Facts

Organizers: Michael Pejic & Damien Mondragon

Tuesday, 2:10-3:00 pm, 939 Evans

Sep. 22 **Douglas Rizzolo**, UC Berkeley
The World is Falling Apart on Me: An Introduction to Random Fragmentations and Related Processes

This talk will start by introducing discrete random fragmentations, i.e. random recursive partitions of $[n]$. Of primary interest is what these look like for large n . Unfortunately, nobody knows — even for many very simple models. However, all is not lost. We will make the connection to general random trees, where there is a convincing theory of the convergence of discrete trees to continuous limits. This will allow us to identify meaningful limits for random fragmentations with nice probabilistic properties. Time permitting, I will introduce a natural family of combinatorial fragmentation models and hint at how techniques from complex analysis can be used to show that if there were any justice in world these models would also have continuous limits.