

DREXEL ANALYSIS SEMINAR

April 8, 2019

2-3 PM, Korman 245

Speaker: Stephen Melczer (Penn)

Title: Asymptotics of multivariate generating functions.

Abstract: The asymptotic study of multivariate generating functions comprises the domain of Analytic Combinatorics in Several Variables (ACSV). Generalizing well-known combinatorial work in the univariate setting, the techniques of ACSV show how the singularities of a (typically rational) multivariate generating function dictate asymptotics of its coefficients. In this talk we survey the uses of analytic methods for combinatorial results and discuss related computational issues, including some new software implementations.