TEXAS ★ STATE
UNIVERSITY
®

The rising STAR *of Texas*

Discrete Mathematics Seminar

Time: Friday, March 3, 2017, 2:15-3:15 PM
Room: 237 Derrick Hall
Title: Introduction to total positivity
Speaker: Dr. Suho Oh, Department of mathematics, Texas State University

Abstract:

We will go through the very basics of total positivty (mostly on positive Grassmannian and plabic graphs). After that, we will briefly go over the two major results in physics : Using plabic graphs instead of Feynman diagrams for calculating scattering amplitudes (Arkani-Hamad et al.) and using plabic graphs to study shallow water waves (Kodama-Williams). This talk will also serve as a motivation for the talk next week by David Xiang (a high school student that particiapated in 2016 math camp), who will talk about positroids (a combinatorial structure associated to the positive Grassmannian).