



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Mike Hartglass

Santa Clara Univ.

*An introduction to
free probability*

WED OCT 05, 2022, MH320

Abstract: Free probability is an analogue of classical probability developed by Dan Voiculescu. The main difference is that the “random variables” no longer need to commute (i.e., XY and YX might be different). Despite this shortcoming, one can provide instances of noncommuting random variables equipped with a good analogue of expectation value. From this, one can develop the concept of free independence of random variables, the analogue to the usual notion of independence in probability. In this talk, I will outline and motivate the basics of the subject. At the end, I will discuss some of my contributions to the field.

Background: Familiarity with basic linear algebra and probability.

About the speaker: Mike Hartglass is currently an Assistant Professor of mathematics at Santa Clara Univ. He received his Ph.D. from UC Berkeley in 2013 under the supervision of Vaughan Jones, and was at U. Iowa and UC Riverside before coming to SCU. He is also an avid amateur bass trombonist, and is a member of the nationally competing San Francisco Brass Band.

SNACKS SERVED OUTSIDE BETWEEN MACQUARRIE HALL AND
SWEENEY HALL AT 2:30PM (WEATHER PERMITTING)
TALK STARTS AT 3:00PM

For more information, see our full schedule at:

<http://www.timhsu.net/colloq/>