

ALGEBRA GRADUATE STUDENT SEMINAR

Guest Speaker: Juan Ramirez

University of Notre Dame

Date: Friday, October 6, 2023

Time: 1:00 PM

Location: 258 Hurley Bldg

Zoom URL: notredame.zoom.us/j/97124319354



Lecture Title:

Some words on Rees algebra of edge ideals

Abstract

Let R be a Noetherian ring and I an ideal. The Rees algebra of I , is defined to be the R -subalgebra, $\mathcal{R}(I) = R[It] = \bigoplus_{i \geq 0} I^i t^i$, of the polynomial ring $R[t]$. Consider a simple graph G and its edge ideal $I = I(G)$. In 1995, Villareal gave a description of the defining equations of the Rees algebra of edge ideals $\mathcal{R}(I(G))$. In this talk, I will present this result and some conditions for when the ideal I is of linear type.