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**Amanda Croll, Roger Dellaca, Justin Hoffmeier, Vivek Mukundan, Denise Rangel Tracy\*** (detracy@syr.edu), **Liana Segal, Gabriel Sosa** and **Peder Thompson**. *Koszul homology and rational Poincaré Series*.

In this talk, we will consider the Koszulness of a local ring. Specially, whether the structure of the homology classes of the Koszul complex can be used to detect if a ring is Koszul. In addition, we will discuss a connection between this and the rationality of Poincaré series of the residue field.

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