1099-13-208 Juan Felipe Perez* (juanfp@umich.edu). Lyubeznik numbers and injective dimension of local cohomology modules in mixed characteristic.

In an effort to understand rings of mixed characteristic Luis Núñez-Betancourt and Emily Witt introduced an analogue of the Lyubeznik numbers for these rings. In this talk, we will give an overview of these numbers as well as some of their properties. We will also discuss related results on injective dimension of local cohomology over regular rings of mixed characteristic. This is joint work with Daniel Hernández, Luis Núñez-Betancourt and Emily Witt. (Received February 09, 2014)