1120-13-109   **Daniel J. Hernández**, **Luis Núñez-Betancourt**, **Felipe Pérez** and **Emily E. Witt***
(`witt@ku.edu`), 1460 Jayhawk Blvd, 405 Snow Hall, Lawrence, KS 66045. *Local cohomology and connectivity in mixed characteristic.*

Certain local cohomology modules determine connectivity properties of the spectrum of a ring; some very interesting connections between these have only been shown in the equicharacteristic setting. In this talk, we present a new vanishing theorem for local cohomology modules in mixed characteristic, and discuss what can be said about connectivity in this setting as a consequence.

This is joint work with Daniel J. Hernández, Luis Núñez-Betancourt, and Felipe Pérez. (Received February 16, 2016)