

1135-13-209

Chloe I. Avery, Caitlyn Booms* (cbooms1@nd.edu), **Timothy M. Kostolansky, S. Loepp**
and **Alex Semendinger**. *Completions of Noncatenary Local Integral Domains*. Preliminary
report.

Let A be a local ring with unique maximal ideal M , and let \widehat{A} be the M -adic completion of A . We say that A is *catenary* if, given any pair of prime ideals $P \subsetneq Q$, the length of every saturated chain of prime ideals between them is the same, and we say that A is *noncatenary* otherwise. In this talk we characterize the completions of noncatenary local integral domains. (Received August 11, 2017)