Sander Mack-Crane* (mack-crane@case.edu) and Samuel Tripp. Local Generic Formal Fibers of Excellent Rings.

Given a local Noetherian ring, we can define a new ring which we call its completion. One interesting relationship between a ring and its completion is the generic formal fiber. We will discuss the existence of excellent rings of characteristic 0 possessing a local generic formal fiber, and present original results and conjectures regarding the existence of excellent rings possessing a local generic formal fiber in characteristic greater than 0. (Received September 10, 2013)