Fei Yu Chen, Hannah Hagan and Allison Wang* (aywang@caltech.edu). On skew polynomial rings over locally nilpotent rings.

In 2013, Kanwar, Leroy, and Matczuk proved that the idempotents in the Laurent polynomial ring arise from the idempotents in the ground ring. In their recent paper, Greenfeld, Smoktunowicz, and Ziembowski asked whether a skew Laurent polynomial ring over a locally nilpotent ring may contain a non-trivial idempotent. We will show that this is not possible for skew Laurent polynomial rings in several variables. (Received September 15, 2018)