1108-14-524   **Ian Shipman*** (`ian.shipman@gmail.com`). *Exceptional collections and rationality.* Preliminary report.

A classical theorem of Beilinson connects sheaves on projective spaces to representations of certain finite dimensional associative algebras. This is possible because projective space admits a full, strong, exceptional collection of sheaves. While rare, full strong exceptional collections show up on other varieties an well, all of which are rational. I will report on joint work with Morgan Brown concerning the rationality problem for varieties with a full, strong, exceptional collection of vector bundles. (Received January 20, 2015)