1117-13-133Sean Sather-Wagstaff* (ssather@clemson.edu), Clemson University, and Rich Wicklein,
MacMurray College. Adic Semidualizing Modules. Preliminary report.

Over a commutative noetherian ring R, dualities with respect to R and with respect to a dualizing module (when one exists) are classical notions. Duality with respect to a semidualizing R-module encompasses both of these notions, but it misses other important dualities, e.g., Matlis duality. In this talk, we present a single notion that encompasses all of these dualities simultaneously. We also show how this notion allows us to construct a dualizing complex over a complete local ring without using Cohen's structure theorem. (Received January 09, 2016)