1035-16-432 **Linhong Wang*** (`lhwang@temple.edu`), Wachman Hall 038-16, 1805 N. Broad Street, Philadelphia, PA 19122. *Completions of quantum coordinate rings.* Preliminary report.

Given an iterated skew polynomial ring over a complete local ring, we prove, under suitable assumptions, that the completion at the augmentation ideal is an iterated skew power series ring. As an application, we show that the completions of quantum matrices and quantum symplectic spaces at their augmentation ideals are complete, local, noetherian, Auslander regular domains with Krull, classical Krull and global dimension all equal to the number of indeterminates. (Received September 06, 2007)