1146-16-350   **Bach Nguyen**, **Kurt M Trampel*** (`ktramp2@lsu.edu`) and **Milen Yakimov**. *Quantum cluster algebras at roots of unity.* Preliminary report.

A general construction is built for quantum cluster algebras at roots of unity. For such an algebra, we construct a canonical central subalgebra that is isomorphic to the classic cluster algebra with the same exchange matrix. In special cases, this recovers the central subalgebras of quantum groups at roots of unity used by De Concini-Kac-Procesi. We take first steps to study the representation theory of these quantum cluster algebras. In particular, we prove a general theorem on the form of the discriminants of these algebras. Applicable examples are quantum Schubert cells and Heisenberg doubles. (Received January 26, 2019)