1135-16-3189 **Bach Nguyen***, bnguy38@lsu.edu. *Quantum cluster algebra and quantum foldings.* Preliminary report.

As a noncommutative analog of cluster algebra, quantum cluster algebra was defined by Berenstein and Zelevinsky in 2005. Since then, it has been an active research area with important applications such as in the study of canonical bases, combinatorics and representation theory. Recently, Goodearl and Yakimov gave a construction of quantum cluster structure for algebras which are CGL extensions. We apply their theory to the setting of quantum foldings and more general situations than that of CGL extensions. This is a work in progress. (Received September 27, 2017)