Se-jin Oh* (sejin092@gmail.com), #108 275 South Garden way, Eugene, OR 97401.
Auslander-Reiten quiver and representation theories related to KLR-type Schur-Weyl duality.

We introduce new notions on the sequences of positive roots by using Auslander-Reiten quivers. Then we can prove that the new notions provide interesting information on quantum groups of finite types, by using their categorifications via modules over KLR-algebras and quantum affine algebras. (Received September 21, 2015)