September 17, 2014: Tristan Bozec (MIT), *Varieties of representations of quivers with loops.*

   We study generalizations of Lusztig canonical and semicanonical bases, in the case of arbitrary quivers, possibly carrying loops. To that end, we have to build a Hopf algebra generalizing usual quantum groups. From the study of Lusztig perverse sheaves and the construction of some Lagrangian subvarieties arises a new combinatorial structure, generalizing Kashiwara crystals.