We analyze the crystal bases for the quantum queer superalgebra recently introduced by Grantcharov et al.. Like crystals of type A, this crystal can be described by explicit operators on words in the alphabet \( \{1, 2, \ldots, n\} \). Like crystals of type A, each connected component of a queer supercrystal has a unique highest (and lowest) weight. In the type A case, if one is given a certain highest weight, one can reconstruct the connected component containing it using simple axioms introduced by Stembridge. However, given a highest weight, it is much more difficult to reconstruct the queer connected component containing it in this way.

Nevertheless, a set of axioms has been conjectured by Assaf and Oguz to do just this. Unfortunately these axioms are not sufficient, in fact they already fail to uniquely characterize the queer connected component containing highest weight \((4, 2, 0)\). In this talk, we provide the additional information which is needed to reconstruct the connected queer crystal which contains a given highest weight. (Received August 19, 2018)