Exceptional collections in derived categories of coherent sheaves have a long history going back to the pioneering work of A. Beilinson. After recalling the general setup, we will concentrate on some recent developments inspired by the homological mirror symmetry. Namely, we will define residual categories of Lefschetz exceptional collections and discuss a conjectural relation between the structure of quantum cohomology and residual categories. We will illustrate this relationship in the case of some isotropic Grassmannians. Based on joint works with Alexander Kuznetsov.