To a degeneration of varieties, we can associate the dual intersection complex, a topological space that encodes the combinatoric of the central fiber and reflects the geometry of the generic fiber. In this talk I will show how the techniques of Berkovich geometry give an insight in the study of the dual complexes. In this way, we are able to determine the homeomorphism type of the dual complex of some degenerations of hyper-Kähler varieties. The results are in accordance with the predictions of mirror symmetry, and the recent work about the rational homology of dual complexes of degenerations of hyper-Kähler varieties, due to Kollár, Laza, Saccà and Voisin. This is joint work with Morgan Brown.