In topological data analysis, persistence modules are used to distinguish the legitimate topological features of a finite data set from noise. Interleavings between persistence modules feature prominently in the analysis. It is known that for any $\epsilon$ positive, the collections of $\epsilon$-interleavings between two fixed persistence modules has an algebraic structure. In this project, we investigate how this structure changes when the value of $\epsilon$ increases. (Received September 24, 2018)