The Mesonic and Nonmesonic Decay Rates of the $^4\Lambda$He SHALVA TSIKLAURI, JOEL HERNANDEZ, Borough of Manhattan Community College — We calculated the lifetime and the mesonic and nonmesonic decay rates of the four body $^4\Lambda$He Hypernucleus by using Hyperspherical Functions method in momentum space for different Nucleon-Nucleon and Lambda Nucleon effective potentials. The effects of final-state interactions and possible three body $\Lambda NN$ decay contributions were studied in the context of a simple model of nucleon-stimulated decay.