

1145-55-581 **Jose A. Perea*** (joperea@msu.edu), joperea@msu.edu. *Learning with Nerve Complexes.*

The nerve complex, as a discrete approximation to the topology of a space, has been used widely in the theory and computation of persistent homology. I will show in this talk how the nerve construction can be used for other machine learning tasks, including dimensionality reduction, classification and regression. (Received September 10, 2018)