

1145-55-955

Jānis Lazovskis* (jlazov2@uic.edu). *Sheaf theory on universal persistent homology spaces.*

The product of the Ran space and the nonnegative reals admits a stratification by simplicial complexes, through the Čech or Vietoris–Rips constructions. This leads to a cosheaf valued in diagrams of simplicial complexes for which every restriction to $\{P\} \times \mathbb{R}_{\geq 0}$ recovers the persistent homology of the data set P . (Received September 17, 2018)