

1145-55-2193 **Ezra Miller*** (ezra@math.duke.edu). *Algebra and geometry of persistence*. Preliminary report.

The classical setup of persistent homology views the homology of thickenings of finite samples from a probability distribution as families of vector spaces. Paying close attention to the algebraic structure of these families is important when trying to learn geometric features of the distribution. (Received September 25, 2018)