1077-00-1013 Jose Perea* (joperea@gmail.com) and Gunnar Carlsson. Topology of Spaces of Micro-Images and Applications.

One of the most celebrated success stories in topological data analysis, is perhaps that of the Klein bottle as a model space for relevant 3×3 patches from natural images. I will explore in this talk how the Klein bottle model can be extended to include other meaningful patches, and describe an application to texture discrimination. (Received September 15, 2011)