1116-55-123 **Jose Perea***, Department of Mathematics, Michigan State University, 619 Red Cedar Road, East Lansing, MI 48824. *The shape of data.*

Topology, and particularly algebraic topology, has been used for decades to study the shape of mathematical objects – from surfaces to categories and spaces of functions.

Recently some of these same ideas have been adapted to the study of data. I will show in this talk how one can use algebraic topology to probe the shape of data, and provide some examples of applications to computer vision and biology. (Received August 02, 2015)