

1059-57-22

**Henry Segerman\*** ([henrys@math.utexas.edu](mailto:henrys@math.utexas.edu)), Department of Mathematics, 1 University Station C1200, Austin, TX 78712. *A generalisation of the deformation variety.*

The deformation variety is similar to the representation variety in that it describes (generally incomplete) hyperbolic structures on 3-manifolds with torus boundary components. However, the deformation variety depends crucially on a triangulation of the manifold: there may be entire components of the representation variety which can be obtained from the deformation variety with one triangulation but not another, and it is unclear how to choose a "good" triangulation that avoids these problems. I will describe the "extended deformation variety", which deals with many situations that the deformation variety cannot. In particular, given a manifold which admits some ideal triangulation we can construct a triangulation such that we can recover any irreducible representation (with some trivial exceptions) from the associated extended deformation variety. (Received January 25, 2010)