

1077-57-2952

**Alexander M Zupan\*** ([alexander-zupan@uiowa.edu](mailto:alexander-zupan@uiowa.edu)), 14 MacLean Hall, University of Iowa,  
Iowa City, IA 52242. *Paths in the pants complex and bridge splittings of knots.*

Recently, Jesse Johnson used paths in the pants complex of a Heegaard surface to define new invariants of a 3-manifold. Analogously, we demonstrate that a bridge splitting of a knot in a 3-manifold gives rise to paths in the pants complex of the bridge surface. These paths serve several purposes: they can be utilized to construct new knot invariants and carry information about the geometry of hyperbolic knots. (Received September 23, 2011)