Fundamental group of the unbounded component in the complement of the Alexander Horned Sphere

(Source: http://mathworld.wolfram.com/AlexandersHornedSphere.html)
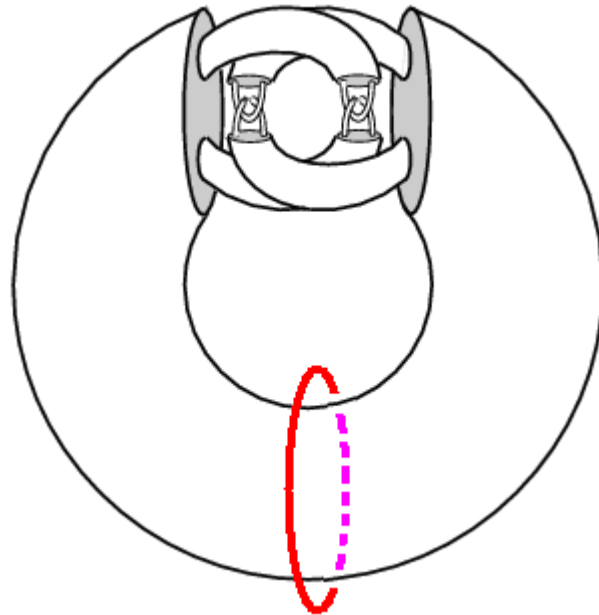
The bounded component of the complement is homeomorphic to the open **3** – disk**,** but in contrast to the standard embedding of the **2** – sphere in **3** – space the fundamental group of the unbounded component of the complement is not even simply connected**.** In the drawing above**,** the red circle represents a nontrivial element of this fundamental group.