

1073-51-72

Sean V. Droms* (svd5d@virginia.edu). *Constructions of Stein Fillings.*

We reprove a result due to Akhmedov, Etnyre, Mark and Smith: using Heegaard-Floer homology, we show the existence of infinitely many simply-connected, homeomorphic but not diffeomorphic Stein fillings of a particular contact 3-manifold (M, ξ) . We will discuss possible extensions to this result with an eye towards decreasing the Betti numbers of M or the page genus of the induced compatible open book decomposition. (Received July 26, 2011)