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Heegaard splittings of amalgamated 3-manifolds and distance in the curve complex.

We show that if two 3-manifolds with connected boundary are glued together using a map of high complexity, then the low-genus Heegaard splittings of the resulting closed 3-manifold are standard in a certain sense. The complexity of the gluing map is defined using curve complex and the boundary curves of certain properly embedded surfaces in the two 3-manifolds. (Received September 16, 2007)