# Mathematics > Geometric Topology

# **Determining When The Universal Abelian** Cover of a Graph Manifold is a Rationla **Homology Sphere**

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It was shown in my earlier article that the splice diagram of a rational homology sphere graph manifold determines the manifolds universal abelian cover. In this article we use the proof of this to give a condition on the splice diagram to determine when the universal abelian cover itself is a rational homology sphere.

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