

# A census of tetrahedral hyperbolic manifolds

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## **Abstract**

We call a cusped hyperbolic 3-manifold tetrahedral if it can be decomposed into regular ideal tetrahedra. Simplest examples of tetrahedral manifolds are the Gieseking manifold and the figure-eight knot complement. We provide a census of all tetrahedral manifolds with at most 25 (orientable case) and 21 (non-orientable case) tetrahedra.

The talk is based on the joint paper with E. Fominykh, S. Garoufalidis, M. Goerner and V. Tarkaev (arXiv:1502.00383).