

Abstract submitted for Thirty-Third Annual Victorian Algebra Conference

Title: Parameter Space of Hyperbolic Cone-Manifold Structures

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Given a triangulated orientable 3-dimensional pseudo-manifold, we show that the set of all (possibly incomplete) hyperbolic cone-manifold structures realised by positively oriented hyperbolic ideal tetrahedra and with prescribed cone angles at all edges is (if non-empty) a smooth complex manifold with explicit parametrisation. This is joint work with Stephan Tillmann and Feng Luo.