

Abstract Submitted
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On the Connection Between Chiral Gravity and String Theory

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Institute for Fundamental Physics Texas A&M University — Topologically Massive Gravity in bulk AdS₃ at the chiral point ($\mu l = 1$), termed Chiral Gravity, is analyzed and found to be equivalent to a Chiral Wess-Zumino-Witten model on the boundary. This not only exhibits an example of the AdS₃/CFT₂ correspondence, but also reveals a natural relationship by which Chiral Gravity can be embedded in string theory. The resulting string theory is then examined and found to restrict the parameter space of the gravity theory, effectively quantizing the anti-de Sitter radius.

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