Pure Quantum Gravity Simulation in 1+1 Dimensions using Causal Dynamical Triangulation NORMAN ISRAEL, JOHN LINDNER, The College of Wooster — Causal Dynamical Triangulation (CDT) is a conservative approach to quantizing gravity. It involves decomposing spacetime into "triangular" building blocks. In computer simulations, we implement CDT in 1+1 dimensions without matter. We compute the ratio of the corresponding universe's mean size to its spread and compare with analytical results.

John Lindner
The College of Wooster