Abstract Submitted
for the APR16 Meeting of
The American Physical Society

Maximal vacuum entanglement principle TED JACOBSON, Univ of Maryland-College Park — I will discuss evidence supporting the hypothesis that entanglement entropy in small geodesic balls is maximal at fixed volume [1]. This is in a sense a microscopic version of the holographic principle, and the evidence for its validity hinges on the Einstein equation. I will also discuss the effort to derive the Einstein equation by assuming the hypothesis is valid, and some relevant results about entanglement variation [2,3,4].

[1] Ted Jacobson, arXiv/1505.04753 [2] Horacio Casini, Damian A. Galante, Robert C. Myers, arXiv/1601.00528 [3] Antony Speranza, in preparation [4] Madhavan Varadarajan, in preparation

Ted Jacobson
Univ of Maryland-College Park

Date submitted: 08 Jan 2016 Electronic form version 1.4