1035-53-930   **Bryon Aragam*** (`naragam1@utk.edu`), **Justin Corvino**, **Andrew Karl** and **Austin Rochford**. *Bishop's Volume Comparison Theorem with Integral Curvature-Bounds on Lorentz Manifolds.*

Our work focused on blending the techniques used by Ehrlich and Sanchez [1998] with the work of Petersen and Wei [1997]. Ehrlich and Sanchez produced a (point-wise) statement of the classical Bishop volume comparison theorem for so-called SCLV subsets of the causal future in a Lorentz manifold, while Petersen and Wei developed and proved an integral version for Riemannian manifolds. We applied Peterson and Wei's method to the SCLV sets, and verified that two essential differential equations from the Riemannian proof extend to the Lorentz setting. (Received September 17, 2007)