

Abstract Submitted
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Quantum Raychaudhuri equation SAURYA DAS, University of Lethbridge — We compute quantum corrections to the Raychaudhuri equation, by replacing classical geodesics with quantal (Bohmian) trajectories, and show that they prevent focusing of geodesics, and the formation of conjugate points. We discuss implications for the Hawking-Penrose singularity theorems, for curvature singularities, for the Einstein equation of state and for Cosmology.

Saurya Das
University of Lethbridge

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