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The Gubser solution of the relativistic Boltzmann equation and its domain of validity MAURICIO MARTINEZ GUERRERO, ULRICH HEINZ, The Ohio State University — In this work we study the evolution of the one particle phase space distribution which is an exact solution to the relativistic Boltzmann equation. This solution describes a conformal system undergoing Gubser flow in the de Sitter space times a line $dS_3 \otimes R$. We show that depending on the initial condition the distribution function can become negative in certain kinematic regions of the available phase space. This non-physical behaviour of the distribution function restricts the validity of its applicability and imposes physical constraints on the initial conditions.

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