Christian Luebbe

University of Leicester

The conformal Einstein field equations for trace-free perfect fluids

Authors: C. Luebbe, J.A. Valiente-Kroon

This talk will discuss the conformal formulation of the Einstein field equations introduced by Helmut Friedrich in the 80s and used to derive existence, uniqueness and stability results for the spacetimes containing vacuum or Einstein-Maxwell-Yang-Mills. These results were recently extended by the authors to radiation fluids (trace-free perfect fluids) to analyse the stability of FLRW spacetimes. I shall give a brief overview over these latest results.