

Burnett's conjecture in General Relativity

lundi 8 avril 2024 11:35 (55 minutes)

In this talk, I will present a work in collaboration with Jonathan Luk, on the behaviour of weak limits of solutions to Einstein equations. In 1989, Burnett conjectured that a metric, obtained as a uniform limit of solutions to Einstein vacuum equation, whose derivatives converge only weakly, is a solution to Einstein-massless Vlasov equations. This conjecture has been back in the spotlight with the work of Green and Wald on perturbations in cosmology. In a recent work with Jonathan Luk, we prove this conjecture, without symmetry assumption, in generalized wave coordinates.

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