

On the uniqueness of general relativity

Wednesday 13 November 2019 15:45 (1 hour)

It is frequently quoted in the literature that general relativity is the only nonlinear theory that can be obtained from massless particles of spin 2. Anyway the technical assumptions behind this statement are not often scrutinized. I will discuss what happens when one of these assumptions is relaxed and I will argue that modern on-shell methods provide a convenient mathematical framework for the analysis of this problem. Finally, I will also discuss the role that soft theorems can play in this context.

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