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Surprising consequences of a positive cosmological constant BATRICE BONGA, Perimeter Institute for Theoretical Physics

The study of isolated systems has been vastly successful in the context of vanishing cosmological constant, $\Lambda = 0$. However, there is no physically useful notion of asymptotics for the universe we inhabit with $\Lambda > 0$. The full non-linear framework is still under development, but some interesting results at the linearized level have been obtained. I will focus on the conceptual subtleties that arise at the linearized level and discuss the quadrupole formula for gravitational radiation as well as some recent developments.