Asymptotics with a positive cosmological constant II ARUNA KE-SAVAN, ABHAY ASHITEKAR, BEATRICE BONGA, The Pennsylvania State University — 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 $\Lambda > 0$. This means that presently there is no fundamental understanding of gravitational waves in our own universe. The full non-linear framework is still under development, but some interesting results at the linearized level have been obtained. In particular, I will discuss the quadrupole formula for gravitational radiation and its implications.