

Abstract Submitted  
for the APR15 Meeting of  
The American Physical Society

**Asymptotics with a positive cosmological constant II** ARUNA KESAVAN, ABHAY ASHTEKAR, 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.

Aruna Kesavan  
The Pennsylvania State University

Date submitted: 09 Jan 2015

Electronic form version 1.4