

Abstract Submitted  
for the APR18 Meeting of  
The American Physical Society

**Systematics of gravitational radiation for asymptotically de Sitter spacetimes**<sup>1</sup> SINA BAHRAMI, Pennsylvania State University — For asymptotically flat spacetimes, the Bondi-Sachs formalism provides a comprehensive description of what the observers measure at Scri. In the case of isolated binary systems, various quantities such as the fluxes of radiated gravitational energy and angular momentum can be computed using a well defined prescription. The success of this formalism hinges on the asymptotic symmetry structure that is unique to “null” Scri. For the case of spacelike Scri, as in asymptotically de Sitter spacetimes, no such symmetry structure has been available. In this talk I will explain some recent progress that has been made in this direction. This is work in progress in collaboration with Abhay Ashtekar and Jerzy Lewandowski.

<sup>1</sup>NSF Quantum Gravity grant PHY 15-0541

Sina Bahrami  
Pennsylvania State University

Date submitted: 16 Jan 2018

Electronic form version 1.4