GLENN BARNICH, Université Libre de Bruxelles & International Solvay Institutes *Asymptotically flat spacetimes revisited: aspects of the BMS/CFT correspondence*

After a brief review of purely gravitational aspects of the AdS3/CFT2 correspondence, a similar analysis is performed for asymptotically flat spacetimes at null infinity in 3 and 4 dimensions. In the spirit of two dimensional conformal field theory, it is shown that the symmetry algebra of asymptotically flat spacetimes at null infinity in 4 dimensions can be taken to be the semi-direct sum of supertranslations with infinitesimal local conformal transformations and not, as usually done, with the Lorentz algebra. As a first application, we derive how the symmetry algebra is realized on solution space. In particular, we work out the behavior of Bondi's news tensor, mass and angular momentum aspects under local conformal transformations. We comment on the implications for the problem of angular momentum in general relativity.