

1137-35-233

Peter Hintz* (phintz@berkeley.edu), 793 Evans Hall, Berkeley, CA 94720, and **Andras Vasy**.
Stability of Minkowski space and asymptotics of the metric.

I will explain a new proof of the non-linear stability of the Minkowski spacetime as a solution of the Einstein vacuum equation. The proof relies on an iteration scheme at each step of which one solves a linear wave-type equation globally. The analysis takes place on a suitable compactification of \mathbb{R}^4 to a manifold with corners whose boundary hypersurfaces correspond to spacelike, null, and timelike infinity; I will describe how the asymptotic behavior of the metric can be deduced from the structure of simple model operators at these boundaries. (Received February 05, 2018)