Unique continuation from infinity for linear waves

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I present various uniqueness results from null infinity, for linear waves on asymptotically flat spacetimes. Assuming vanishing of a solution to infinite order on suitable parts of future and past null infinity, we derive that the solution must vanish in a domain in the interior. I will elaborate on the role of the background geometry in this problem. In particular, it turns out that for spacetimes with positive mass the required assumptions are much weaker than those required for Minkowski spacetime. The results are nearly optimal in many respects. This work is partly motivated by questions in general relativity, and was obtained jointly with Spyros Alexakis and Arick Shao.