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Conservation of asymptotic charges from past to future null infinity¹ KARTIK PRABHU, Cornell Univ — We show that asymptotic symmetries and charges on past null infinity can be matched to those on future null infinity using the Ashtekar-Hansen structure of spatial infinity. This provides a conservation law for asymptotic charges from past to future null infinity in a general class of spacetimes. We focus on electromagnetic fields and comment on the generalization to supertranslations in General Relativity. We also comment on the extension to the full BMS group of symmetries.

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