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Matching asymptotic charges between past and future null infinity in general relativity. IBRAHIM SHEHZAD, Cornell University, KARTIK PRABHU, University of California Santa Barbara — An important question in understanding the conservation laws that constrain classical gravitational scattering in asymptotically flat spacetimes in general relativity is the question of how the Bondi-Metzner-Sachs (BMS) asymptotic symmetries at past null infinity are related to those at future null infinity. In this presentation, I will review what is known about this matching of symmetries and talk about work in progress aimed at proving the matching of the full BMS group and the associated charges between past and future null infinity.

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