

The quest for a flat space hologram has recently been boosted! This talk will focus on efforts to probe aspects of quantum gravity in asymptotically flat spacetimes via the Celestial Hologram, whereby scattering amplitudes in 4D asymptotically flat spacetime are recast as correlation functions of a 2D conformal field theory living on the celestial sphere. We will begin with a brief introduction to celestial holography and set up celestial amplitudes, before diving into some recent results on the tree-level MHV gluon sector including the light transforms of the four-point function, conformal block decompositions, and differential equations. We close with some work in progress, revisiting the BCFW recursion relation for celestial amplitudes and focusing on two limits: small  $z$  and large  $z$ . We discuss how the celestial CFT data encodes the general rule of the large- $z$  behavior determining which shifts are allowed, while the infinitesimal limit is tied to the celestial bootstrap program via the BG equations.