

# Theoretical Physics Seminar

Monday, February 10, 2020 / Pupin Hall Theory Center, 8<sup>th</sup> Floor / 2:10 PM

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## **"Pushing the limits of the double copy"**



In this talk, I will explain what the double copy relation is. Firstly, I will look at the case of Yang-Mills  $\wedge^2$  = Gravity and afterward its generalization to scalar EFTs. This relation was originally formulated for scattering amplitudes, but recently it has been shown to hold on more general contexts. I will talk about extensions related to classical solutions, both exact and perturbative. I will focus on the cases of the double copy for curved spacetimes, 3d gravity, and scalar EFTs. Lastly, I will explain when the double copy holds if we include higher dimensional operators for the EFTs.