

## **Seminar: Soft theorems for scattering on plane wave backgrounds**

*Tuesday 1 July 2025 14:30 (45 minutes)*

We have seen in the last few years that our understanding of scattering amplitudes in flat space can be leveraged for high-precision calculations in classical GR. In this talk I will motivate why you should also care about the structures of amplitudes on non-trivial backgrounds - not just flat space! One structure that is fundamental in our study of flat space amplitudes is soft factorisation. Here, I present how the leading soft theorems of amplitudes are modified when we consider scattering on plane wave backgrounds, and why this is crucial when calculating observables on these backgrounds.

**Presenter:** KLISCH, Sonja