

## **E. Gasperin: The good-bad-ugly system near spatial infinity on flat spacetime (WP2)**

*Monday, June 5, 2023 2:40 PM (40 minutes)*

A model system of equations that serves as a model for the Einstein field equation in generalised harmonic gauge called the good-bad-ugly system is studied in the region close to null and spatial infinity in Minkowski spacetime. This analysis is performed using H. Friedrich's cylinder construction at spatial infinity and defining suitable conformally rescaled fields. The results are translated to the physical set up to investigate the relation between the polyhomogeneous expansions arising from the analysis of linear fields using the spatial-infinity-cylinder framework and those obtained through a heuristic method based on Hormander's asymptotic system.