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### **E. Gasperín: The GBU system close to spatial infinity: a log story**

*Tuesday 20 December 2022 09:45 (15 minutes)*

A 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 space-time. 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  $i0$ -cylinder framework and those obtained through a heuristic method based on Hörmander's asymptotic system.

**Session Classification:** Session 5