

## EFFICIENT NUMERICAL METHODS FOR DIRECT AND INVERSE WAVE PROPAGATION PROBLEMS

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### ABSTRACT

Hyperbolic equations and wave propagation phenomena are fundamental in numerous scientific and industrial applications, from seismic modelling to acoustics and electromagnetics. Over the years, the development of highly efficient and robust numerical methods has significantly enhanced our ability to understand and solve these complex models. This mini symposium will explore the latest advancements in the numerical discretization of direct and inverse wave propagation problems, both in the time and frequency domains, with a focus on fast, accurate, and scalable solution techniques. By bringing together leading experts in the field, this event aims to foster dynamic discussions, inspire new collaborations, and drive innovation in numerical methods for wave phenomena.