

**Yan, Lin****Global uniqueness of an inverse problem for stochastic degenerate wave equation with three unknowns.** (English) [Zbl 1479.35960](#)[Math. Methods Appl. Sci. 44, No. 17, 12545-12558 \(2021\).](#)

Summary: This paper concerns an inverse problem for a stochastic degenerate wave equation. This inverse problem aims to determine a source term and an initial displacement and an initial velocity from the boundary observation and the final time observation. More precisely, we will prove a global uniqueness for our inverse problem by a suitable Carleman estimate for the stochastic degenerate wave equation.

**MSC:**[35R30](#) Inverse problems for PDEs[35A02](#) Uniqueness problems for PDEs: global uniqueness, local uniqueness, non-uniqueness[35L20](#) Initial-boundary value problems for second-order hyperbolic equations[35R60](#) PDEs with randomness, stochastic partial differential equations[60H15](#) Stochastic partial differential equations (aspects of stochastic analysis)**Keywords:**[Carleman estimate; stochastic degenerate wave equation](#)**Full Text:** [DOI](#)