



# Unique continuation and approximate controllability for a degenerate parabolic equation

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This paper studies unique continuation for weakly degenerate parabolic equations in one space dimension. A new Carleman estimate of local type is obtained to deduce that all solutions that vanish on the degeneracy set, together with their conormal derivative, are identically equal to zero. An approximate controllability result for weakly degenerate parabolic equations under Dirichlet boundary condition is deduced.

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