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*Strong Unique Continuation and Complexity of Solutions to Parabolic Partial Differential  
Equations with Gevrey Coefficients.*

We address the strong unique continuation problem for higher order parabolic partial differential equations with Gevrey coefficients. We provide a quantitative estimate of unique continuation (observability estimate) for ranges of the Gevrey exponents strictly including non-analytic Gevrey classes. As an application, we obtain a new upper bound on the number of zeros for the solutions with a polynomial dependence on the coefficients. (Received August 13, 2010)