

# İSTANBUL ANALYSIS SEMINARS

## GEVREY REGULARITY OF BENJAMIN-BONA-MAHONY EQUATION AND EXISTENCE OF DETERMINING NODES

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**Abstract:** We prove the Gevrey regularity of the global attractor of the dynamical system generated by the generalized Benjamin-Bona-Mahony equation with periodic boundary conditions. This result means that elements of the attractor are real analytic functions in spatial variables. As an application we prove the existence of two determining nodes for the problems in one spatial dimension.

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Bankalar Caddesi 2, Karaköy 34420, İstanbul