1145-35-1087 **Alex A. Himonas*** (himonas.1@nd.edu), Department of Mathematics, University of Notre, Hurley 255, Notre Dame, IN 46556. *Lower bounds on the radius of spatial analyticity for nonlinear evolution equations.*

In this talk we will discuss lower bounds on the radius of spatial analyticity for solutions of the Cauchy problem of two important integrable evolutions equations, namely, the Camassa-Holm and Korteweg-de Vries equations. For a class of analytic initial data with a given uniform radius of analyticity, we shall present asymptotic lower bounds on the uniform radius of analyticity at time t, as t goes to infinity. The talk is based on works with Professors G. Petronilho, R. Barostichi, S. Selberg, H. Kalisch. (Received September 18, 2018)