WICHITA STATE UNIVERSITY
Department of Mathematics and Statistics

The Lecture Series in the Mathematical Sciences Presents Our Guest:

Professor Oleg Imanuvilov
Iowa State University, Ames IA

"Exact Controllability of Evolution Equations"

Abstract:
Professor Imanuvilov graduated from Moscow State University in 1986 and received his PhD from the same university in 1991. He was a professor at Moscow State Forest Institute and research fellow at the Korean Institute for Advanced Study. Since 1998, Dr. Imanuvilov has been a professor at Iowa State University. His research area is optimal control and inverse problems for partial differential equations. He (with A. Fursikov, and J.M Coron) solved the outstanding problem of exact controllability for fundamental evolution equations (parabolic and Navier-Stokes).

In his lecture he will discuss this topic, in particular, for incompressible fluid flow. Namely any steady state of the Navier-Stokes system can be achieved as a final state of the dynamical Navier-Stokes system with the initial condition arbitrarily close to the steady state and with the source term localized in an arbitrary small subdomain of the original domain. The main used technique is Carleman inequalities.

Friday, October 29, 1999
3:00 PM in 335 Jabara Hall

Please come join us for refreshments before the lecture at 2:30 p.m. in room 353 Jabara Hall.