The Lecture Series in the Mathematical Sciences Presents Our Guest:

Prof. Evgeny Poletsky
Syracuse University, Syracuse, NY

“Polynomial Approximations and Plurisubharmonic Functions.”

Abstract:
In this talk we will give the review of results about the approximation of functions by polynomials on the complex plane including the famous theorems of Weierstrass, Lavrent'ev, Walsh and Mergelyan. It will be explained how the potential theory helps to prove these theorems. We also will talk about Kolmogorov's theory of n-widths of compact sets and its applications to the approximation theory. Then we will talk about the approximation by polynomials in several dimensions and, mainly, the recent proof of Kolmogorov's conjecture regarding n-width of compact sets of compact sets in spaces of holomorphic functions. This proof was based on the pluripotential theory and we will present its brief description.

Friday, February 28, 2003
3:00 PM in 372 Jabara Hall

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