## SPECIAL MATH CLUB TALK 4:30 PM, 21 February 2008, 232 Lockett

## Nonsmooth Analysis: The Mathematics of Optimization



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Abstract: Nonsmooth analysis is the study of generalized notions of derivatives for functions that are not necessarily differentiable in the usual sense. It is an important area of mathematical analysis that undergirds much of modern optimization theory. The theory of nonsmooth analysis was developed by Francis Clarke and his school in the 1970's, and has since been employed in economics, engineering, finance, and other areas. This talk will provide a nontechnical overview of this theory and a glimpse at some of the many applications in which nonsmooth analysis has had a major impact.

Biography of Speaker: Professor Wolenski received his Ph.D. in Mathematics in 1988. He held positions at Imperial College of Science and Technology in London and the University of Montreal and has lectured extensively throughout the US and Europe. He came to LSU in 1990 and is now the Russell B. Long Professor of Mathematics. He has more than 50 publications including many in leading mathematics journals.

All undergrads and grad students are invited.

Refreshments will be provided.