

UNIVERSITY OF CALIFORNIA, RIVERSIDE
DEPARTMENT OF MATHEMATICS

VICTOR L. SHAPIRO DISTINGUISHED
LECTURE IN MATHEMATICS

Presents

A SPECIAL LECTURE BY

PROFESSOR CHARLES FEFFERMAN
Princeton University

“Fitting a Smooth Function to Data”

Abstract: Given an arbitrary set E in \mathbb{R}^n , and a function $f: E \rightarrow \mathbb{R}$, how can we tell whether there exists F in $C^m(\mathbb{R}^n)$ such that $F=f$ (or F is very near f) on E ? How small can we take the C^m norm of F ? What can be said about the Taylor polynomial of F at a given point? Can we take F to depend linearly on f ? If E is finite, can we compute an essentially optimal F ? How many operations does it take? Some of the results are joint work with Bo'az Klartag.

Monday, December 5, 2005, 4:30pm
Location?

(ask if light refreshments will be served before or
after in 284)

Parking permits can be purchased at the Parking Kiosks located at the University Avenue and Canyon Crest entrances. For more information, call the Department of Mathematics (951) 827-2978, or send email to Beverly@math.ucr.edu.