Center for Applied Mathematical Sciences Distinguished Lecture Fall 2010

Charles Fefferman



The Muskat Problem

Abstract: The problem concerns the evolution of the interfaces between two or more fluids in a porous medium. The talk presents new phenomena arising when at least three fluids are present. (Joint work with several coauthors.)

Friday December 3, 2010 KAP 414

> Reception: 3:00-3:30 pm KAP 410

Charles Fefferman is the Herbert Jones Professor in mathematics at Princeton University. He was a child prodigy who entered college at the age of 12. He received a PhD from Princeton when he was 20 and he received a full professorship at the University of Chicago when he was 22. This made him the youngest full professor appointed in the US. His many honors and awards include the Fields Medal, the Waterman Award, the Salem Prize, the Bocher prize and the Bergman Prize. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. His research to date includes a vast number of key results in diverse areas: harmonic analysis, mathematical physics, fluid dynamics, neural networks, geometry, spectral analysis and mathematical finance.

Lecture: 3:30-4:30 pm

CAMS Director: Susan Friedlander susanfri@usc.edu

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