

CALIFORNIA STATE UNIVERSITY, LONG BEACH

THE MATHEMATICS COLLOQUIUM

presents

Dr. Terry Fuller

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speaking on

Lefschetz fibrations of 4-dimensional manifolds

Friday, February 4, 2005

12:00PM-1:00PM

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Abstract: A Lefschetz fibration of an even-dimensional manifold is a map from that manifold to a surface with the property that the point pre-images of that map give a fibration by submanifolds, where all but a finite number of those submanifolds are smooth, and the non-smooth ones are immersed in a prescribed way (to be described). In this talk, we will begin by describing the easiest-to-visualize picture of Lefschetz fibrations on 2-dimensional manifolds. We will then generalize this picture to describe Lefschetz fibrations in four dimensions, and discuss some recent results which illuminate the important role of these fibrations in 4-manifold theory.