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MATHEMATICS COLLOQUIUM SERIES  
UNIVERSITY OF CENTRAL FLORIDA

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**The Scalar Curvature Deformation  
Equation on Locally Conformally Flat  
Compact Manifolds**

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Abstract: Since the complete resolution of the Yamabe problem in the mid 1980's, the scalar curvature deformation equation  $\Delta_g u - c(n)R(g)u + Ku^{\frac{n+2}{n-2}} = 0$  has remained an active research topic in the areas of differential geometry and geometric PDEs. In this talk I will survey some of the fundamental results and ideas in the study of this equation and describe some recent work on uniform a priori estimates for the solutions.

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DATE: Monday, February 12, 2007  
TIME: 3:30 – 4:30 pm  
PLACE: Math and Physics Building, Room 318

Refreshments served at 3:00 am in Room 318.