Universität Konstanz

Fachbereich Mathematik und Statistik

Prof. Dr. R. Denk, Prof. Dr. R. Racke, Prof. Dr. O. Schnürer

Im

Oberseminar Partielle Differentialgleichungen

gibt es am

Donnerstag, dem 18. Juni 2015,

einen Vortrag von

Dr. Olaf Müller

(Universität Regensburg)

"Conformal compactifications and Einstein-Maxwell-Dirac Theory"

Beginn: **15.15 Uhr**

Raum: **F 426**

Interessenten sind herzlich willkommen!
R. Denk, R. Racke, O. Schnürer

Abstract: In this talk, we first present the concept of conformal extensions - a certain generalization of conformal compactifications - and its implications in the analysis of the Maxwell-Dirac equations. Then we show which restrictions the requirement of conformal extendibility imposes on the topology and geometry of the standard Cauchy surfaces in the case of standard static space-times. Finally, we explain a new approach to present the Einstein-Dirac-Maxwell equations as a variational principle for a function on a Frechet manifold, and to show the existence of a maximal Cauchy development.

(invited by Prof. Dr. Schnürer)