

A Variational Approach to Robertson-Walker Spacetimes with Homogeneous Scalar Fields

R. GIAMBO' (JOINT WORK WITH F. GIANNONI
AND G. MAGLI)¹

Dipartimento di Matematica e Informatica, Universita' di Camerino, Italy

roberto.giambo@unicam.it

Abstract

Existence of homogeneous scalar field solutions in spherical symmetry between prescribed configurations is studied, using a 'modified' version of Euler-Maupertuis least action variational principle. Solutions of the problem are obtained as limit of approximating variational problems, solved using techniques introduced by Rabinowitz.

¹The talk will be presented by the first author (R. Giambo')