Table of contents

i

Spring School on Superstring Theory and Related Topics | (smr 1935)

Monday 31 March 2008

SEMINAR: Lovelock Gravity at the Crossroads of Palatini and Metric Formulations - Leonardo da Vinci Building Main Lecture Hall (15:45-16:30)

Extensions of the Einstein-Hilbert Lagrangian to a general functional of metric and Riemann curvature tensor is considered A given such Lagrangian describes two different theories depending on considering connection and metric (Palatini formulation), or only the metric (metric formulation) as independent dynamical degrees of freedom. Equivalence of the Palatini and metric formulations at the level of equations of motion, which as we will argue is a manifestation of the causality based on Einstein relativity, is a physical criterion that restricts form of Lagrangians of modified gravity theories. We prove that within the class of modified gravity theories we consider, only the Lovelock gravity satisfies this requirement.

time	title	presenter
15:45	SEMINAR: Lovelock Gravity at the Crossroads of Palatini and Metric Formulations	M.M. SHEIKH-JABBARI