IPM

School of Physics
Ph.D Defense Session

Title:

Holographic Entanglement Entropy in Generalized Gravity and Time Dependent Geometries

Candidate:

Mohammad Reza Mohammadi Mozaffar, IPM

Venue:

Farmanieh Seminar Room

Time:

10:00 am, June 14, 2015

یکشنبه، ۲۴ خرداد ۱۳۹۴

Abstract:

In this thesis using the gauge-gravity correspondence we study the holographic entanglement entropy (HEE). Using the generalized versions of the first recipe for computing HEE, we extend our studies in two different directions. First we consider the prescription for finding HEE in higher derivative gravities in some specific models e.g. new massive gravity, log gravity and conformal gravity theories. Then using the covariant prescription, we study the time evolution of HEE and other related quantities during the process of thermalization. Also we study the thermalization process in a back-ground which is non-relativistic and show that it exhibits certain scaling behaviors during the process.