



**ΚΟΙΝΟ ΣΕΜΙΝΑΡΙΟ ΚΕΝΤΡΟΥ ΚΒΑΝΤΙΚΗΣ ΠΟΛΥΠΛΟΚΟΤΗΤΑΣ ΚΑΙ
ΝΑΝΟΤΕΧΝΟΛΟΓΙΑΣ & ΚΕΝΤΡΟΥ ΘΕΩΡΗΤΙΚΗΣ ΦΥΣΙΚΗΣ ΚΡΗΤΗΣ /**

JOINT CCQN -CTP SEMINAR

Tuesday, 29 September 2015

14:15-15:15

2nd Floor Seminar Room

An exact model for non-equilibrium phenomena

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Abstract

Algebraically special asymptotically AdS spacetimes have the distinct characteristic that the boundary metric and the dual stress tensor are related locally independent of the initial conditions. We will show that this relation can be captured by a complex symmetric traceless and conserved tensor, whose form is related to the Petrov classification of the bulk spacetime. This holographic point of view allows us to get immense wealth of information about multi-point thermal correlation functions of the stress-tensor in the dual field theory. We will show that infinite number of hydrodynamic transport coefficients of a special type should vanish in such field theories. We can also extract similar information about correlation functions even far beyond the hydrodynamic regime.