



**ΚΟΙΝΟ ΣΕΜΙΝΑΡΙΟ ΚΕΝΤΡΟΥ ΚΒΑΝΤΙΚΗΣ ΠΟΛΥΠΛΟΚΟΤΗΤΑΣ ΚΑΙ  
ΝΑΝΟΤΕΧΝΟΛΟΓΙΑΣ & ΚΕΝΤΡΟΥ ΘΕΩΡΗΤΙΚΗΣ ΦΥΣΙΚΗΣ ΚΡΗΤΗΣ /  
JOINT CCQCN -CCTP SEMINAR**

**Monday, 11 May 2015**

**11:30-12:30**

**2nd Floor Seminar Room**

**Holographic RG flow and the Quantum Effective Action**

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**Abstract**

The calculation of the full (renormalized) holographic action is undertaken in general Einstein-scalar theories. The appropriate formalism is developed and the renormalized effective action is calculated up to two derivatives in the metric and scalar operators. The holographic RG equations involve Ricci flow for the space-time metric as well as the standard  $\beta$ -function flow for scalar operators. Several examples are analyzed and the effective action is calculated. A set of conserved quantities of the holographic flow is found, whose interpretation is not yet understood

