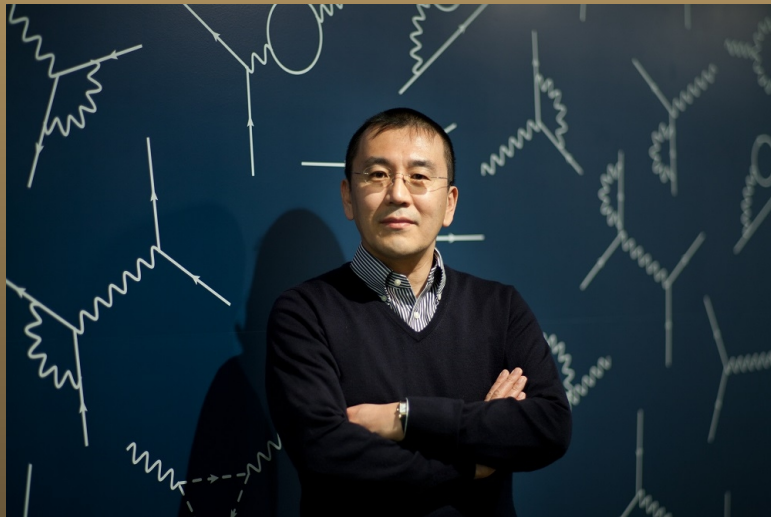




Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Constraints on Quantum Gravity



Hiroshi Ooguri
(Caltech)

Date: April 27, 2018

Time: 11:30 am

Venue: A-304, TIFR

Given an effective theory of gravity, how can one judge whether it is realized as a low energy approximation to a consistent quantum theory with ultra-violet completion, such as string theory? Swampland conditions delineate constraints on low energy effective theories of quantum gravity. I will discuss two of such constraints : constraints on symmetry and weak gravity conjectures. I will give a proof of the former in the context of the AdS/CFT correspondence and provide evidences for the latter.

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