ICTS String Seminar

Title	:	Bootstrapping Matrix Quantum Mechanics
Speaker	:	Sean Hartnoll (Stanford University)
Date	:	Thursday, July 23, 2020
Time		06:00 pm (IST)
Abstract	:	Matrix quantum mechanics theories are at the heart of holography, but only the simple case of a single matrix has been tractable. We have developed a new method to calculate the spectrum and expectation values of operators in matrix quantum mechanics, including with multiple matrices. Firstly, we relate the expectation values of simple operators to those of more complicated operators. We then impose certain positivity constraints on the longer operators. This is seen to strongly constrain the simple expectation values. Using this method we easily reproduce the known solution of single-matrix quantum mechanics, and then go on to obtain new results on the ground state of two-matrix quantum mechanics. This talk is based on 2004.10212.
ICTS virtual seminar	:	Please register at https://docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGiuIWiOmh9WX8caH-pr13qDBZOO91lmg/viewform (Links to join the seminars will be sent to your registered email address)

Recordings of past talks can be found here:
https://www.youtube.com/channel/UCw9LdPQ5t7Q7muD0qzn70TA