

Black Hole Thermodynamics Then and Now

12th Madan Lal Mehta Lecture by

Professor Edward Witten

Institute For Advanced Study, Princeton

Monday, April 19, 2021 at 6:30 pm

Venue - Zoom

Live Webcast - <https://youtu.be/w811XaubHE>

I will explain some of the main ideas of black hole thermodynamics, going back to its origins in the 1970's in the work of Bekenstein and Hawking and continuing with more contemporary developments that depend on a fine-grained understanding of quantum entropy.



Professor Edward Witten is one of the most distinguished theoretical physicists of the last half century. His numerous contributions include his remarkably elegant exact computation of Wilson line correlation functions in Chern Simons theories leading to a three dimensional physics interpretation of the Jones polynomial, many fundamental contributions to the study of quantum field theory and string theory including the study of strong weak coupling duality, and a large number of creative applications of quantum field theory to obtain new results in mathematics. Professor Witten's long list of honours and awards includes a Fields Medal, the Inaugural Fundamental Physics Prize, and a Dirac Medal.