

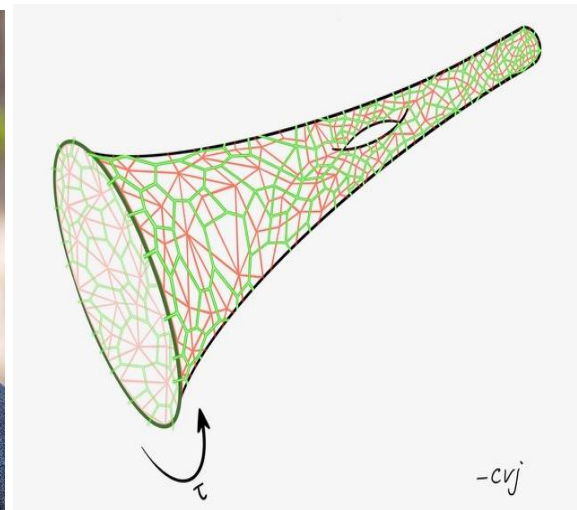
The Mark W. Zemansky Lecture

Speaker: Clifford V Johnson

Affiliation: Department of Physics and Astronomy, University of Southern California

April 3, 2023, 4:00 to 5:00 PM

Venue: ASRC Auditorium, [85 St. Nicholas Terrace New York, NY 10031](#)



Title: “Wigner Meets ’t Hooft Near the Black Hole Horizon”

Abstract: There has been exciting recent progress in the study of the quantum nature of black holes through the use of certain exactly solvable models. This work shows how to realize, in concrete terms, various long-held expectations about quantum gravity, such as the transition from describing physics in terms of smooth spacetimes to a description in terms of the underlying quantum microstates. Random matrix models are central to the discussion and provide fascinating connections to several other fields in statistical physics, chaotic dynamics, and mathematics. It is explained why it is crucial to use both t’Hooftian and Wignerian perspectives to uncover all the physics. Possible lessons for the program of quantum gravity in more general settings are discussed.



Mark W. Zemansky, (1900-1981) Professor of Physics, The City College of New York:

Mark Waldo Zemansky (May 5, 1900 – December 29, 1981) was an American physicist for decades was a Professor of Physics at the City College of New York. He is best known for co-authoring University Physics, a highly regarded introductory physics textbook, with Francis Sears (thus, this book is often called "Sears and Zemansky").

Mark Zemansky graduated from City College of New York in 1921 and went on to receive his Ph.D. from Columbia University in 1927. In 1925, he joined the faculty of City College of New York. Dr. Zemansky taught for over four decades at the City College of New York until 1967, retiring as Professor Emeritus of Physics. As chairman of the Physics Department from 1956 to 1959, he brought it into the modern era. From 1963 to 1966 he was the first executive officer of the City University's new doctoral program in Physics. In 1956 he was awarded the Oersted Medal by the American Association of Physics Teachers.

Biography thanks to [Wikipedia](#).

Support has been provided by the City College Fund, Michael Lubell, Zemansky
Professor of Physics.