

**UCLA**

**Mani L. Bhaumik**  
Institute for Theoretical Physics

# **Distinguished Bhaumik Lecture and Physics & Astronomy Colloquium**

## **String Theory and the Dark Sector**

**Cumrun Vafa**  
(Harvard University)

**Thursday, October 2nd 2025, 4PM**  
**PAB 1-434**

Refreshments will be served at 3:30PM on the PAB 3rd floor patio.

Undergraduates welcome!

Prof. Vafa is the Hollis Professor of Mathematicks and Natural Philosophy and the chair of the Physics Department at Harvard University, where he has conducted research and taught theoretical physics since 1985. Born in Iran in 1960, he moved to the US for higher education where he received his B.S. in math and physics from MIT before moving to Princeton University, where he received his Ph.D. in theoretical physics.

The dark sector — comprising dark energy and dark matter — has remained a profound mystery for decades. In this talk, I will review this subject and show how string theory naturally leads to a predictive framework for a unified dark sector. I will also discuss how these string-theoretic predictions align with exciting recent cosmological observations from the DES and DESI collaborations.

