

The 6th **PUBLIC** ExU COLLOQUIUM

June 6th (Fri.) **ONLINE**

TALK 11:00 - 12:00 (JST)

June 5th (Thu.) 19:00 - 20:00 (PDT)

June 6th (Fri.) 2:00 - 3:00 (GMT)

ONLINE CHAT TIME
12:00 - 13:00 (JST)

Registration required (click [HERE](#))



Speaker

[Prof. Gary Horowitz](#)

University of California, Santa Barbara

Extreme Universe, JAPAN



MEXT -KAKENHI- Grant-in-Aid for Transformative Research Areas (A)
The Natural Laws of Extreme Universe

Spacetime Singularities and Black Holes

Abstract

General relativity predicts the existence of spacetime singularities, i.e., regions where the theory breaks down and must be replaced by a quantum theory of gravity. I will discuss the connection between singularities and black holes. I first discuss singularities inside black holes. This is the usual case and is an old story, but there have been some recent developments. I will next describe some new results which show that some black holes have singularities on their surface. Finally, I will discuss the possibility of singularities outside black holes.



Extreme Universe 2025