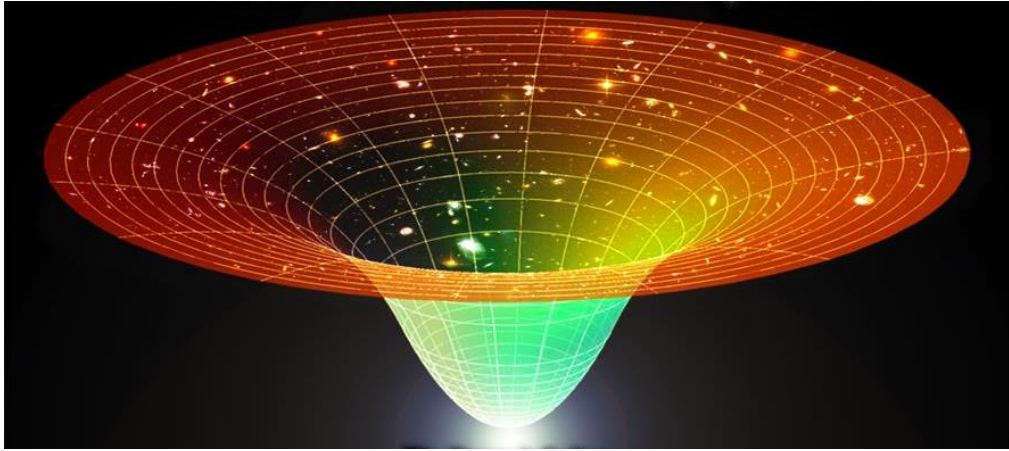


# COLLOQUIUM



Dr. Nathan Inan  
Clovis Community College

## **Inertia and Propulsion from the Gravitational Field of the Universe**

### **Abstract**

The origin of inertia has long baffled physicists. Why do objects exhibit a resistance to a change in motion? When you push on an object, why does it push back? And can this reaction force be used in future space exploration by propelling spacecrafts without the need for propellant? . . . Answers to these questions have been sought within the framework of General Relativity (Einstein's theory of gravity) and modern cosmology (the Lambda cold dark matter model) which describe the Hubble expansion of the universe. The history of this topic will be discussed, followed by current theoretical and experimental research that investigates whether answers to these questions can be explained by the gravitational field of the universe.

[\[Zoom link\]](#)

**3:00 p.m. – 4:00 pm, Friday, October 29<sup>th</sup> (live & virtual)**