Abstract

In Einstein's equation, the Cosmological Constant corresponds to the vacuum energy of spacetime. This constant is at the heart of some of the most important questions in fundamental physics: from the observed accelerated expansion of the universe to gravitational holography. In this talk, I will discuss what the Swampland program may have to teach us about the Cosmological Constant. The Swampland is defined to be composed of all the effective theories not compatible with quantum gravity. I will therefore be concerned with how quantum gravity may constrain the value of the cosmological constant.