

---

# Towards self-consistent black hole solutions in Asymptotically Safe Gravity

Alessia Platania\*<sup>1</sup>

<sup>1</sup>Heidelberg University – Germany

## Abstract

In this talk I will discuss the modifications of classical black hole solutions induced by Asymptotically Safe Gravity. The effects of a running Newton's constant can be taken into account by means of an iterative procedure. It will be shown that, under certain assumptions, the iteration converges and gives rise to a black hole solution which encodes the running of the gravitational coupling in a self-consistent way.

---

\*Speaker