

# Backreaction effects of matter coupled higher derivative gravity on transport properties

Lata Kh Joshi<sup>\*</sup>

[kharkwal.lata@gmail.com](mailto:kharkwal.lata@gmail.com)

---

In this talk I will discuss the backreacted background solutions for a scalar matter coupled higher derivative gravity action. Using gauge/gravity duality I will revisit shear viscosity and entropy density for a strongly coupled field theory. The talk will be focused on elaborating the effects of these backreaction terms on the transport coefficients.

---

<sup>\*</sup>Department of Physics, Indian Institute of Technology Bombay, Room-216, Mumbai, Maharashtra 400076, INDIA.