



ICTS

INTERNATIONAL  
CENTRE *for*  
THEORETICAL  
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

## ICTS String Seminar

**Title** : Amplitudes for Hawking Radiation

**Speaker** : Donal O'Connell (The University of Edinburgh, United Kingdom)

**Date** : Thursday, 08 May 2025

**Time** : 3:30 PM (IST)

**Abstract** : In recent years, ideas from quantum field theory, including effective field theory and the on-shell methods of scattering amplitude, have been successfully applied to classical gravitational-wave physics. In this talk, I will show that these ideas extend to the semiclassical case of Hawking radiation. Along the way, I will discuss the relationship between Bogoliubov coefficients and generalised amplitudes.

**Venue** : Online

Zoom Link: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>

Meeting ID: 880 9276 6911

Passcode: 232322