

Allgemeines Physikalisches Kolloquium

Donnerstag, 16.07.26 – 16 Uhr c.t.

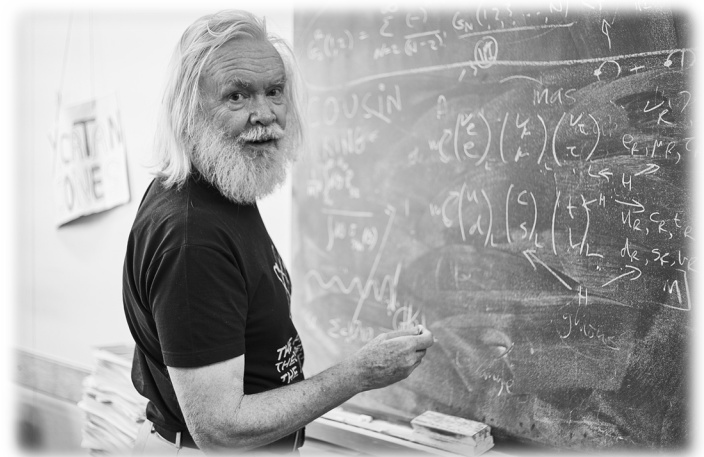
IG1 – HS 2 / Wilhelm-Klemm-Str. 10

Kolloquiums-Kaffee ab 16 Uhr

vor dem Hörsaal

Prof. Dr. Jonathan R. Ellis

(King's College London / CERN)



© CERN-PHOTO-201707-170-37 (CC-BY-4.0)

Chasing the Biggest Bangs since the Big Bang with Gravitational Waves

How were the supermassive black holes at the centres of galaxies assembled? Mergers of lower-mass black holes probably played a role, and can be studied by observations of gravitational waves (GWs). Atom interferometers offer opportunities for detecting gravitational waves (GWs) in the deci-Hz frequency range that is inaccessible to laser interferometers, which could give insights into the merger mechanisms for assembling supermassive black holes, and also constrain alternatives to cold dark matter. With these motivations in mind, I will describe the AICE atom interferometry facility that is proposed for construction at CERN.