IQSE AMO QO Seminar Series

Tuesday, April 5th, 11:30 am ZOOM & IQSE seminar room (MPHY 578)

Pizza will be served for IQSE members at 11:00 am. The talk will start around 11:30 am

William G. Unruh

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The origin of acceleration temperature

EVENT DETAILS: Acceleration temperature (an accelerated object in the vacuum seems itself as immersed in a thermal bath with temperature proportional to acceleration) was an aspect of quantum field theory which was only discovered about 40 years after quantum field theory was discovered. This talk will examine the basics of the process, and show that it generically occurs if there exist positive norm (the symplectic norm, -- special cases are the Klein Gordon norm, or the Electromagnetic or photon norm.) modes (solutions of the classical equations for the free field theory) which contain paths along which the frequency of the mode is negative frequency (e^(i omega t)). This can occur in a wide variety of situation, including acceleration temperture, Cherenkov radiation, Landau critical velocity in a superfluid, revolving atoms.

ZOOM information:

https://tamu.zoom.us/j/98156251523?pwd=QVdSdGxtL1UyY0g1L083SU5QR0QrUT09

Meeting ID: 981 5625 1523
Passcode: 297578

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