



## General Interest Seminar

**Title:** Living in a land with two times

**Speaker:** Prof. Brendan Guilfoyle (IT Tralee)

**Date:** Mon 2nd September 2019 at 3:00PM

**Location:** Seminar Room SCN 1.25

**Abstract:** In this talk I will discuss the utilisation of neutral metrics – metrics of signature  $(n,n)$  – to investigate manifolds of various dimensions. Such metrics with more than one negative eigenvalue, while relatively neglected in comparison to their Riemannian and Lorentzian counterparts, arise in a surprising number of natural settings. In particular, embedding problems between manifolds often inherit such a metric. To illustrate this a series of canonical isometric embeddings will be presented along with their links with classical surface theory, the X-ray transform, invariants of knots, and quasi-linear Navier-Stokes equations.

There will be tea and coffee afterwards in the common room. Everyone is welcome.