



## UCD School of Mathematics and Statistics Colloquium Seminar

**Title:** Wandering around a fibrous network when all the paths look very much alike

**Speaker:** Professor WILFRID KENDALL (University of Warwick)

**Date:** Wed 24th April 2024 at 2:00PM

**Location:** E0.32 (beside Pi restaurant)

**Abstract:** I will give an overview of work I have been interested in for the last decade or so, concerned with generating models based on Poisson processes which supply insight into route-finding and traffic flows. Initial constructions (Aldous 2014, Kahn 2016, Kendall 2017) showed existence of such models satisfying the SIRS<sub>N</sub> axioms formulated by Aldous (2014). But these constructions all involve infinitely long linear paths, and in particular do not easily admit local influences. Can one do better? I shall discuss recent work showing that SIRS<sub>N</sub> can indeed arise under far less stringent conditions, based on line segments or even suitably stiff fibres.