



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 SIRSN 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 SIRSN can indeed arise under far less stringent conditions, based on line segments or even suitably stiff fibres.