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A brief history of my research and teaching

The aim of this talk is to introduce myself by providing an overview of my research and teaching background and some ideas for my future at University College Cork. In order to give a more detailed example of my research, I will focus on one research project about a new type of tipping and its potential role in climate. This type of tipping, called multi-frequency tipping, involves the break-up of an attracting torus. Therefore, in contrast to “classic” bifurcation-induced tipping, the tipping scenario is characterised by not a single bifurcation, but a sequence of bifurcations. There is evidence that multi-frequency tipping offers a potential explanation for dynamics observed in simulations of the shut-down of the ocean circulation in the Atlantic.