Statistics and Actuarial Science Seminar

Title: The grammar of conflict: Discovering motifs in armed violence

Speaker: Thomas Chadefaux (Trinity College Dublin)

Date: Thu 12th February 2026 at 3:00PM

Location: E0.32 (beside Pi restaurant)

Abstract: Does history repeat itself, or do conflicts merely rhyme in their own unpredictable ways? The Patterns of Conflict Emergence (PaCE) project asks whether wars follow a discoverable grammar—a set of temporal rules that structure how violence escalates, endures, and subsides. Drawing on three decades of global conflict data, we develop a framework that treats conflicts as evolving temporal sequences rather than isolated events. Using automated pattern-recognition and time-series clustering techniques, we identify recurring motifs that reappear across regions, scales, and historical periods. These results reveal that conflict dynamics show systematic regularities that can be detected, classified, and used for forecasting. Motif-based models trained on these temporal structures significantly improve predictions of conflict trajectories weeks to months ahead, outperforming traditional correlational approaches while requiring fewer contextual covariates. PaCE shows that the timing and sequencing of events have predictive power that rivals or exceeds structural factors.