

Program of ITRN 2019

5th - 6th September 2019
Queen's University Belfast
Ashby Building, Stranmillis Road, Belfast BT9 5AH

Thursday 5 th September	
08.15 - 09.00	Conference Registration Room: 03.013 (Third Floor – Ashby Building)
09.00 - 09.30	Welcome and Introduction Chair: B Gosh Room: 03.014 (Third Floor – Ashby Building)
09.30 - 10.15	Keynote Speaker – Prof. M. Maher Estimating the effects of interventions in road safety modelling Chair: B. Gosh Room: 03.014 (Third Floor – Ashby Building)
10.15 - 10.30	Break - Tea/Coffee Room: 03.013 (Third Floor – Ashby Building)
10.30 - 12.00	Sessions A & B
12.00 - 13.30	Lunch Room: 03.013 (Third Floor – Ashby Building)
13.30 - 15.00	Sessions C & D
15.00 - 15.30	Break - Tea/Coffee Room: 03.013 (Third Floor – Ashby Building)
15.30 - 17.15	Session E
19.00	Conference Dinner at Canada Room/Council Chambers (Lanyon Building)

Friday 6th September	
09.15 - 10.15	Keynote Speaker – Prof. E. R. Wilson Mathematics to model the driverless vehicle system Chair: S Moutari Room: 03.014 (Third Floor – Ashby Building)
10.15 - 10.30	Break - Tea/Coffee Room: 03.013 (Third Floor – Ashby Building)
10.30 - 12.00	Sessions F & G
12.00 - 13.30	Lunch Room: 03.013 (Third Floor – Ashby Building)
13.30 - 14.00	Best Paper Prize Chair: B Gosh Room: 03.014 (Third Floor – Ashby Building)
14.00	Conference Close Chair: B Gosh Room: 03.014 (Third Floor – Ashby Building)

Session A Infrastructure Design and Maintenance		Session B Traffic Psychology and Behaviour	
Chair: G Amato		Chair: B Ghosh	
Thursday 10.30 – 12.00	Room 03.014	Thursday 10.30 – 12.00	Room 03.016
Pitfalls and challenges of time series analysis techniques for bridge structural health monitoring <i>(T Buckley, V Pakrashi & B Ghosh)</i>	ID-29	Using Bluetooth Low Energy Devices to monitor visitor activity in remote amenity spaces <i>(A Alanbouri, D Powell, D Berry, N Holmes, L D'Arcy & J Mcgrory)</i>	ID-8
Is the Pavement Surface Condition Index system delivering strategic outcomes at municipal level? <i>(P Harrington & P Naughton)</i>	ID-13	Driving behaviour change – M50 attitudinal research 2019 <i>(C Rountree)</i>	ID-3
Real-time damping estimates from the vibration of Daly's bridge <i>(B Bhowmik, B Hazra & V Pakrashi)</i>	ID-28	Cyclist and pedestrian in autonomous vehicles view <i>(A Alshkeili, B Ghosh & M O'Byrne)</i>	ID-30
Design and testing of a spring-operated speed bump electrical regeneration system <i>(C Mulholland)</i>	ID-37	The development of a Bikeability Index for Castletroy, Co. Limerick <i>(J O'Toole & R Higgins)</i>	ID-35

Parallel Session C Transportation Systems Analysis		Parallel Session D Emerging Technologies in Transport and Traffic Engineering	
Chair: E Murphy		Chair: M Ryan	
Thursday 13.30 – 15.00	Room 03.014	Thursday 13.30 – 15.00	Room 03.016
Impact of periodic special speed limits and driver feedback signs on road speeds <i>(M Rooney & B McCann)</i>	ID-16	A state-of-the-art review of Network level bridge management systems and proposal of new approach for predictive maintenance <i>(M Lydon, S Taylor, D Lydon, & D Bennett)</i>	ID-33
Pavement condition from falling weight deflectometer testing <i>(G Hall & P Naughton)</i>	ID-10	Effect of subset image parameter selection on the measurement of displacements in beams using UAVs <i>(E Polydorou, D Robinson, S Taylor, P McGetrick)</i>	ID-36
The difficulties associated with vibration-based monitoring systems for damage detection in bridges <i>(C O'Higgins, D Hester, P McGetrick & D Robinson)</i>	ID-25	Finite Element Analysis of the Performance of Geosynthetic Reinforced Soil - Integrated Bridge Systems (GRS-IBS) <i>(K McCafferty & P Naughton)</i>	ID-9
Validation of acceleration and deceleration in proximity to junctions under CNOSSOS-EU <i>(JP Faulkner, M Cassidy, E Murphy, J Kennedy & H Rice)</i>	ID-14	Intelligent speed assistance technologies: a review <i>(M Ryan)</i>	ID-23

Session E Traffic Modelling	
Chair: R Murray	
Thursday 15.30 – 17.15	Room 03.014
Vehicular emission and possible mitigation from Heavy Duty Vehicles (HDV): insights from MAP-HDV project <i>(B Ghosh, B Caulfield, A Mane & B Djordjevic)</i>	ID-32
Assessment of congestion pricing strategies and their applications <i>(N Stevens and S Moutari)</i>	ID-26
Cork bus route evaluation using spatial analysis <i>(S Kelly and B Ghosh)</i>	ID-31
Vulnerability and Risk Analysis of Road Networks: Case of Belfast Metropolitan Area <i>(E Henderson, A Catterson & S Moutari)</i>	ID-2
Modelling the impact of potential Brexit scenarios on cross-border transport in Ireland <i>(K Morchid)</i>	ID-4

Parallel Session F Transportation and Public Health Chair: D O'Neill	Parallel Session G Transport Planning and Policy Chair: N Williams
Friday 10.30 – 12.00 Room 03.014	Friday 10.30 – 12.00 Room 03.016
Medical conditions and co-morbidity reported by Irish drivers applying for or renewing driving licences <i>(B Woulfe, S Pai, D O'Neill & M Ryan)</i> ID-12	The new EU regulation concerning event data recorder <i>(J Long, N Maher, E Schwartz & R Turner)</i> ID-27
Driving in later life: findings from the Irish longitudinal study on ageing <i>(M Gormley & D O'Neill)</i> ID-22	Sustainable urban mobility plans from Europe informing their development in Ireland <i>(J O'Flaherty & B McCann)</i> ID-11
Road traffic noise exposure and cognitive impairment in older adults: Evidence from Ireland <i>(O Douglas, E Murphy, A Nolan & S Lyons)</i> ID-15	EDR data as a defence against motor insurance fraud <i>(J Long, N Maher, E Schwartz & M Maguire)</i> ID-24
	Drivers, discourse, cyclists, and social theory <i>(N Williams)</i> ID-5