09:00 **Introduction to the Transit Analytics Lab (TAL)**
Words of Welcome and Update on TAL Activities (Amer Shalaby)

09:20 **Transit Analytics Related to Planning and Scheduling**
(Moderator: Brendon Hemily)
- Planning Integrated On-Demand and Scheduled Bus Transit Services: Guiding Principles (Alaa Itani)
- Incorporating Service Reliability in Multi-Depot Vehicle Scheduling: Stochastic Optimization Approach (Margarita Castro)
- Transfer Synchronization in Transit Networks: Stochastic Programming Approach (Zahra Ansarilari)
- Advanced Real-Time Transit Management Strategies in Mixed-Traffic Arterials (Kareem Othman)
- Coordinated and Bi-Objective Transit Signal Priority (TSP): Optimization Using a Deep Reinforcement Learning Approach (Wenxun Hu)

10:30 Break

10:50 **Operations Analytics to Improve Rail Performance**
(Moderator: Amer Shalaby)
- Using Customer Facing WiFi Data for the Analysis of Subway Service Performance and User Experience (Aidan Grenville and Willem Klumpenhouwer)
- Modelling Origin-Destination Demand in Toronto's Subway Network using Wi-Fi and AFC Data (Diego Da Silva and Feras Elsaid)
- Disruption Delays in Nanjing Urban Rail Transit Network: Analysis of Disruption Duration and Frequency (Jinyi Chen)
• Analyzing Stochastic Railway Networks Using Event-Based Mesoscopic Simulation (Willem Klumpenhouwer)

12:00 Lunch Break

12:45 Keynote Presentation

TransLink Tomorrow; Promoting Innovation in Transit through Collaboration on Research
Graham Cavanagh, Senior Planner - New Mobility, Strategic Planning & Policy

1:30 Transit Analytics Applications from the Field
(Moderator: Brendon Hemily)
Presentations highlighting applications or initiatives involving advanced analytics at transit systems.
• Using Data and Analytics at Metro Transit (Eric Lind, Manager, Research & Analytics)
• Applied Planning Intelligence at WMATA (Catherine Vanderwaart, Strategic Planning Advisor, Office of Planning)

2:30 Break

2:45 Transit Analytics to Support Policy and Equity
(Moderator: Amer Shalaby)
• Potential Policy Analyses Using the Equity Dashboard Platform (Willem Klumpenhouwer and Diego Da Silva)
• An Equity Evaluation of Bus Prioritization Measures within the Toronto Transit Commission’s 5-year Service Plan & 10-year Outlook (Alex Tabascio)
• Assessment of Toronto Transit Network Resilience and Effects on Social Equity (Rick Liu)
• Investigating the Impact of COVID-19 on Post-Pandemic Transit Demand (Sk. Md. Mashrur)

3:55 Wrap-Up

4:00 End of Research Day