DTA2023: The 9th International Symposium on Dynamic Traffic Assignment
Beyond DTA

July 9-12, 2023
Conference website https://sites.northwestern.edu/dta2023/
Submission link https://easychair.org/my/conference?conf=dta2023

Deadline for submission of extended abstracts January 6, 2023

Previous symposia were held in Leeds (UK, 2006), Leuven (Belgium, 2008), Takayama (Japan, in 2010), Martha's Vineyard (USA, 2012), Salerno (Italy, 2014), Sydney (Australia, 2016), and Hong Kong (China, 2018). The 2020 Symposium (Seattle, WA, USA) was rescheduled to a virtual format in 2021 due to the COVID-19 pandemic.

This Symposium series aims to foster excellence in dynamic traffic assignment (DTA) research and practice, and provide a forum for exchanging innovative ideas and challenges on DTA and related transportation science problems. The theme of DTA2023 is "Beyond DTA", recognizing the central role that DTA and network models have come to assume in many transportation planning and operations problems. From strategic planning for emerging autonomous vehicle technologies and new shared mobility services, to the real-time operation of intelligent transportation and logistics systems, network models and DTA are called upon to provide the backbone analytics for modern transportation systems design and management. In this process, DTA-based methods increasingly interact with data streams from multiple sources, creating challenging new problem classes to address emerging opportunities for the delivery of mobility services.

The foundations are solid, and the field is wide open for innovations in fundamental theories, models, algorithms, and applications. DTA 2023 will provide a unique forum for researchers, academics, and practitioners for taking stock of the state of play, and sharing insights and knowledge about novel problem classes and breakthroughs in various aspects of existing approaches.

The Symposium will take place on the beautiful campus of Northwestern University along Lake Michigan. It will last three full days (Monday to Wednesday), preceded by a networking event on Sunday evening.

Topics

The conference will take an inclusive approach to the topics addressed in the areas of network modeling, large-scale regional modeling, agent behavior, flow relations, algorithms, machine learning and hybrid methods, as well as application areas – multimodal and intermodal systems, micromobility, shared mobility, freight, and logistics.

Example topics include:

Agent choice modeling in networks (route, departure time, activity engagement…)
Within-day, day-to-day, and multi-day multi-state equilibria
Flow modeling at multiple resolutions (micro/meso/macro/hybrid)
Solution algorithms and properties
Computational approaches for large scale problems, heuristics
State estimation at O-D, path and link levels
DTA with network fundamental diagrams (NFDs)
Dynamic control and management
Online dynamic models and real-time data integration
DTA tools and decarbonization objectives
Activity-based modeling and analysis
Game theory on extended networks, Nash-Stackelberg games
Network-scale transport electrification
Multimodal and intermodal networks – public transit applications
Autonomous and/or connected vehicle applications
Mixed fleet games and equilibrium properties
Fleet mobility services (shared vehicles/taxis micromobility)
Network resilience and vulnerability

Submission Timeline:

All presentations and printed materials shall be in English.
January 6, 2023: Deadline for extended abstract submission
March 15, 2023: Authors notified of abstract acceptance
May 20, 2023: Deadline for submission of final extended abstracts

Contact

For enquiries, please contact:

Conference Secretary
E-mail: dta2023@northwestern.edu