

# Traffic flow theory and characteristics (TFTC) committee meeting

July 23 2019

**Participants:** Sign-in sheet

**Meeting host:** Soyoung Ahn, University of Wisconsin - Madison

Detailed information can be found in the PPT prepared by Soyoung Ahn

## I. Chair report

### 1. Two Calls for papers for TRB 2020

- (1) Modeling, Calibration and Validation of Connected and Automated Vehicles: methods and data sources
- (2) Improved flow modeling and advanced control strategies for large-scale urban traffic networks

### 2. Two proposed workshops at TRB 2020

- (1) AHB45(1) SimSub: Traffic flow simulation – persistent challenges
- (2) AHB45(3) CAV Sub: The Advancement of Modelling Connected and Automated Vehicles: Past and Future

### 3. Membership Update

- (1) Secretary: Ludovic Leclercq, IFSTTAR (Next chair)
- (2) Committee Research Coordinator: Vikash V. Gayah, Penn State University
- (3) Committee Communication Coordinator: Ilgin Guler, Penn State University
- (4) Welcoming new members: Montasir Abbas, Robert Bertini, Danjue Chen, Jack Haddad, Rachel James, Jiwon Kim, Kaan Ozbay, Hwasoo Yeo, Ali Zockaie
- (5) Rotating members: Mark Brackstone, Christine Buisson, Winnie Daamen, Nikolas Geroliminis, Jorge Laval, Stephen Mattingly, Yanfeng Ouyang, Vincenzo Punzo, Majid Sarvi, Tomer Toledo, Hans Van Lint, Yibing Wang

### 4. TRB Centennial → TRB turns 100 on November 11, 2020

- (1) Draft Centennial Paper from TFT committee submitted: <http://tft.eng.usf.edu/index.htm>
- (2) **Some suggestions during the meeting** for the Historical paper session of Centennial activities
  - presentations of old members: to identify topic, prepare a list of papers, and find suitable persons to report papers of each topic (short presentations by PhD students, etc)
  - presentation of good TRR papers: in a way to present the history and some perspectives in the future

## II. Presentations of Subcommittees

### 1. SimSub from AHB45(1)

- Simulation workshop of Sunday can bring together researchers, vendors and users of traffic flow simulations
- Simulation housing TSSM in discussion
- Simulation workshop in April 2020, Irvine, CA

### 2. Crowd flow dynamics, modeling and management, from AHB45(2)

- Committee meeting to present latest works (Amsterdam). The meeting focuses on data and data sharing of the community: innovative techniques and applications.
- Manuel preparation

### 3. Traffic flow modeling for CAVs (AHB45(3)) (details in the PPT file)

- (1) Call for papers for CAV
- (2) AVS, 2019: limited participation  
2020: AHB45(3) task force (discussion on added value for participation)
- (3) Website: <https://tftCAV.seas.gwu.edu>
- (4) Subcommittee: CAT co-sponsorship with (1) AHB15 (2) AHB30

## III. Research problem statements

### 1. Subcommittee members

- Vikash Gayah, Penn State (Committee research coordinator)
- Mohammed Hadi, Florida International University
- Rachel James, FHWA

- Haizhong Wang, Oregon State University
- 2. NCHRP problem statements: Due Nov 1 2019
- TFTC related TSSM problem statements
- Reach out to stat DOTs through TFTC members

### 3. TRB Paper review:

- Presentation only: 2 reviewers required
- Presentation and publication: at least 3 reviewers required  
(Editorial group: recommend board members but no known updates. No confirmation from the editorial group)
- Timetable  
Important dates: Sep 30 – Oct 15: 1<sup>st</sup> round decision  
Nov 15: Revised papers due  
Dec 1 – Dec 15: 2<sup>nd</sup> round decision  
Jan 31 2020: final decision

### 4. TRTC Awards

- (1) Award subcommittee: Ludovic Leclercq, Rob Bertini, Jiwon Kim, Monica Menendez
- (2) Award considered:
  - D. Grant Mickle Award (nomination made)
  - Fred Burggraf Award: Influence of autonomous vehicles on car-following behavior of human drivers
  - Cunard Award (nomination made)
  - Best paper on Traffic Flow Theory: Analysis of a two-regime Stochastic Car-Following Model: for explaining capacity drop and oscillation instabilities
  - Greenshields Prize: no award

## **IV. Outreach and Diversity Subcommittee**

1. Newsletter: a way of communication (<http://tftcnews.blogspot.com/>) → to minimize emails of committee update checking
2. Social Media: - Twitter and facebook accounts: Lama Al Hajj Hassan (NUTC)  
- Contents: committee updates including workshops, meetings, awards, member updates, newsletter highlights, etc.
3. Webinars:
  - ISTTT webinars was delayed to focus on ISTTT 23 papers
  - Journal club needs a webinar platform to handle more than 20 people → the Texas A&M platform will not be available for next year

## **V. Summer meetings**

### 1. TFT@AMS: Aug 17 – 19 2020, hosted by AMS Amsterdam & TU Delft

- (1) Amsterdam has great facilities for meetings
- (2) Working title: Traffic flow theory and the city.
- (3) Selected topics:
  - Active mode traffic operations
  - advancing the NFD
  - CAV in the city, including interaction with other modes
  - Flow operations and management during events
  - Traffic flow operation in and around multimodal transfer hubs
  - Big urban traffic data
  - Traffic flow and AI
- (4) Important dates
  - CfP and event overview: 1<sup>st</sup> Aug 2019
  - Deadline of extended abstracts (5 pages maximum): 1<sup>st</sup> March 2020
  - Acceptance notification: 15<sup>th</sup> April 2020
  - Conference date: 17 – 19 August 2020
  - Invitations special issues: 1<sup>st</sup> September 2020
  - GOOD news: selection of papers to be published in special issues (TR-C, Collective Dynamics)
- (5) Venue and hotels
  - news: <https://www.ams-institute.org>
  - hotels: Lloyd Hotel, Volkshotel hotel, The Student Hotel, etc
- (6) Bonus:** SAIL 2020, a week before the meeting in Amsterdam

2. ISTTT24 in Beijing, China, 24 – 26 July 2021
  - call for papers: <http://isttt24.buaa.edu.cn/>

- Deadline for extended abstract : December the 1<sup>st</sup>, 2019
- 3. 2022 meetings: location to be decided (in US)
  - Send proposals to Soyoung Ahn
  - Discuss and vote during the TFTC meeting in Jan 2021.

## **VI. Liaison with other committees**

1. with AHB40: summer meeting of 2019 was in San Diego Argentina. (next time meeting: July 2020)
2. Task Force on System Simulations (AHB80T)
3. No other questions or business...