

# iLoc—High-integrity Localization for Automated Vehicles

## CALL FOR POSTERS

Aug. 15, 2023

Submission  
Deadline

Aug. 16, 2023

Decision  
Notification

Sep. 24, 2023

Workshop  
Session

Workshop #: **WS15**

If you have questions, please send an email to: [philippe.xu@hds.utc.fr](mailto:philippe.xu@hds.utc.fr)

Prof. Dr. Philippe Xu; Prof. Dr. Philippe Bonnifait; Prof. Dr. Claus Brenner; Dr. Hao Cheng;  
Dr. Javier Ibanez-Guzman; Prof. Dr. Steffen Schön; Jingyao Su, M.Sc.; Jeldrik Axmann, M.Sc.

The 2<sup>nd</sup> iLoc workshop aims to address the localization integrity requirements of automated vehicles.

**We are pleased to open a call for poster presentation in this workshop.**

The call is open to present **novel**, **past** or **ongoing research** related to the topics covered by the workshop. Authors that will present a related paper at the ITSC'23 conference are also more than welcome to present a poster in this workshop.

## Practical information

- Information to provide: a proposal should contain **the name and affiliation of the authors**, **a title** and **an abstract**
- Submission: the proposal needs to be sent to Dr. Philippe Xu ([philippe.xu@hds.utc.fr](mailto:philippe.xu@hds.utc.fr))

## Topics of Interest

At this workshop, the research topics of interests include but are not limited to:

- What are the leading factors for high-integrity localization for AVs?
- Which multi-sensor architectures and data fusion methods are best suited for autonomous driving?
- How to estimate the uncertainty and integrity risks applicable to model-based and data-driven approaches to localization?
- How can maps be used to increase localization integrity?
- How to combine a vehicle kinematic model and road geometry to improve integrity estimation?
- What are the integrity metrics needed for AVs?
- Are there any emergent standards applicable to the estimation of integrity in ITS?
- How to verify experimentally the system localization integrity when considering low risks?
- Uncertainty estimation of LiDAR point clouds registration and imagery data processing in e.g., probabilistic and deep learning-based models
- State-of-the-art deep learning multi-modal data fusion for e.g., GNSS, LiDAR point clouds, images, 3D map localization information with integrity estimation.

SCAN ME

