Title: Automated Methods for Surrogate Safety Analysis: Where We Are and Where to Go Next

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However they are called, traffic conflict techniques or methods for surrogate safety analysis have seen renewed interest in the past decade. This is related in particular to the development of automated methods often based on video analysis that promise to address the main shortcomings of manual methods: cost, reliability and objectivity. The first part of this talk will present a probabilistic framework that takes into account the various potential paths that may lead road users to collide and makes therefore the computation of severity indicators, firstly time to collision, more robust and generic. This framework has been demonstrated on several case studies amounting to hundreds of hours of video: urban intersections, roundabouts and highways, motor vehicles and vulnerable road users.

The second part of this talk will discuss open questions and action items to finally bring the promises of these surrogate methods to fruition, from the lack of availability and comparability of the methods, past and present, and data to the validation of the methods.