



## Séminaire du Laboratoire sur les systèmes de transport intelligents du CIRRELT

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### TRAFFIC CONFLICT ANALYSIS OF VULNERABLE ROAD USERS

**Abstract:** Traffic safety evaluation has traditionally focused on accident data, despite important shortcomings. Therefore, many researchers have shifted their perspective from accidents to near-accidents, or traffic conflicts, as surrogate measures for traffic safety. In general, a traffic conflict is defined as a situation in which two or more road users will collide, if their speed and direction remain constant. Many traffic conflict indicators have been developed that describe the severity of these events, but they are mainly based on motorized road users. However, vulnerable road users have different characteristics (e.g. a pedestrian can stop almost instantaneously and a bicycle is far more maneuverable than a car), which means that they have different abilities to avoid a collision. Furthermore, current indicators only use time and/or distance measurements to describe crash-proximity, but other factors can be important additions. This research sets out to a) investigate which behavioral processes influence traffic conflict occurrence, b) examine the applicability of current traffic conflict indicators for vulnerable road users' safety evaluation and c) identify which objective measures beside time and distance can be included in traffic conflict indicators.

This research seminar provides a general introduction into traffic conflict analysis and gives an overview of the current research progress. A scoping review into behavioral observation studies and a traffic conflict observation study at Channelized Right-Turn Lanes in Belgium will be discussed.

**Note:** Wouter Van Haperen is a Ph.D. student at University of Hasselt. He is doing an internship with Nicolas Saunier at Polytechnique Montréal.

VENDREDI / FRIDAY

3 février 2017 /  
February 3rd, 2017  
11h

Salle / Room 5441  
Pavillon André-Aisenstadt  
Université de Montréal

Ouvert à tous / Open to all

Organisateur / Organizer  
Nicolas Saunier



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