**Miniworkshop “Invariants and Integrable Systems”**
**University of Antwerp, Belgium**
**June 19-20, 2026**

# Marsden-Meyer-Weinstein reduction for contact manifolds

**Bartosz Zawora**

**(KU Leuven & Warsaw)**

The Marsden-Meyer-Weinstein reduction theorem for contact manifolds has brought significant attention of many researchers. The first generalisation of the classical Marsden-Meyer-Weinstein reduction theorem for contact manifolds was proven by C. Albert in 1989. However, this result applies only to co-orientable contact manifolds and depends on the choice of a contact form within its conformal class.

In my talk, I will present an overview of the fundamental definitions in contact geometry and the Marsden-Weinstein-Meyer reduction theorem. Then, I will review various approaches to the contact Marsden-Meyer-Weinstein reduction theorem, emphasising their limitations. In particular, I will focus on the technical condition introduced by C. Willet and illustrate its necessity with a counterexample. Then, I will introduce a new version of the contact Marsden-Meyer-Weinstein reduction theorem that is more general than all previously known formulations.