1163-55-1303   **Wojciech Chachólski**, **Barbara Giunti** and **Claudia Landi*** (`claudia.landi@unimore.it`).
Invariants for tame parametrised chain complexes.

The aim of this presentation is to explain why extracting persistence invariants in Topological Data Analysis is an example of the homotopical process of approximating complicated objects by simpler ones. It can be comprehensively applied to several cases that standard persistence theory handles separately, such as persistence modules, zigzag modules, and commutative ladders. On the one hand, this unifying framework helps to understand more thoroughly known aspects of persistence. On the other hand, it allows us to extract computable invariants also in certain cases, such as commutative ladders, that have not been covered by more standard approaches. (Received September 15, 2020)