

---

# An equivalence of multistatistics on permutations

Arthur Nunge<sup>\*1</sup>

<sup>1</sup>Laboratoire d'Informatique Gaspard-Monge (LIGM) – Université Paris-Est Marne-la-Vallée, Ecole des Ponts ParisTech, ESIEE [Paris], Fédération de Recherche Bézout, Centre National de la Recherche Scientifique : UMR8049, ESIEE Paris – Université de Paris-Est Marne-la-Vallée, Cité Descartes, Bâtiment Copernic, 5 bd Descartes, 77454 Marne-la-Vallée Cedex 2, France

## Abstract

We prove a conjecture of J.-C. Novelli, J.-Y. Thibon, and L. K. Williams (2010) about an equivalence of two triples of statistics on permutations. To prove this conjecture, we construct a bijection through different combinatorial objects, starting with a Catalan based object related to the PASEP.

---

<sup>\*</sup>Speaker