

Papers and abstracts of accepted papers are available at

<http://www.math.ethz.ch/~pdehaye/papers/>

General subject areas of the papers are indicated in bold.

IN PREPARATION

- *Combinatorics of lower order terms in the moments conjecture for the Riemann zeta function.* (**algebraic combinatorics, number theory**)
- (with Yacine Barhoumi) *On k -Plancherel averages.* (**algebraic combinatorics**)
- *Plancherel averages of rational functions of contents of partitions.* (**algebraic combinatorics**)

SUBMITTED

- *Integrality of hook ratios.* [arXiv://1111.5959](https://arxiv.org/abs/1111.5959) (**combinatorics**)
- (with C. Schretter and L. Kobbelt) *Golden ratio sequences for low-discrepancy sampling.* (**computer graphics**)

ACCEPTED

- (with Guo-Niu Han) *A multiset hook length formula and some applications*, in *Discrete Mathematics*, (311) 23–24, pp. 2690–2702, 2011 (**combinatorics**)
- (with Dirk Zeindler) *On averages of randomized class functions on the symmetric groups and their asymptotics*, to appear in *Ann. Inst. Fourier (Grenoble)* (**algebraic combinatorics**)
- *On an identity due to Bump and Diaconis, and Tracy and Widom*, in *Canadian Mathematics Bulletin* 54 (2011), no. 2, 255–269. (**algebraic combinatorics, random matrix theory**)
- *A note on moments of derivatives of characteristic polynomials*, in *DMTCS Proc. Formal Power Series and Algebraic Combinatorics 2010*, vol. 12. With conference poster. (**algebraic combinatorics, random matrix theory**)
- *Joint moments of derivatives of characteristic polynomials*, in *Algebra & Number Theory* 2 (2008), no. 1, 31–68. (**algebraic combinatorics, random matrix theory**)
- *Averages over classical Lie groups, twisted by characters*, in *J. Combin. Theory Ser. A* 114 (2007), no. 7, 1278–1292. (**algebraic combinatorics, random matrix theory**)
- (with Henry Segerman) *Autoglyphs*, in *Math. Intelligencer* 26 (2004), no. 2, cover art and pp. 37–39. (**recreational mathematics**)
- (with Daniel Ford and Henry Segerman) *One hundred prisoners and a lightbulb*, in *Math. Intelligencer* 25 (2003), no. 4, 53–61. (**recreational mathematics**)
- (with Francis Buekenhout and Dimitri Leemans) *RWPRI and $(2T)_1$ flag-transitive linear spaces*, in *Beiträge Algebra Geom.* 44 (2003), no. 1, 25–46. (**incidence geometry**)
- *On the structure of the group of multiplicative arithmetical functions*, in *Bull. Belg. Math. Soc. Simon Stevin* 9 (2002), no. 1, 15–21. (**number theory, algebra**)

THESES

- *Averages over compact Lie groups, twisted by Weyl characters and application to moments of derivatives of characteristic polynomials*, Ph.D. under the supervision of [Daniel Bump](#) at Stanford University, 2006. (**algebraic combinatorics, random matrix theory**)
- *Espaces linéaires flag-transitifs et RWPri*, under the supervision of [Francis Buekenhout](#) and [Dimitri Leemans](#) at the Université Libre de Bruxelles, 2001. (**incidence geometry**)