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 (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)
· Joint moments of derivatives of characteristic polynomials, in Algebra & Number Theory 2 (2008), no. 1, 31–68. (algebraic combinatorics, random matrix theory)
· (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)
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)