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## CURRICULUM VITAE

Date of birth: October 3rd 1976.  
Nationality: Belgian.  
Languages: French, English, Danish (fluent).

**Research Interests:** Algebraic topology, homotopy theory and geometric topology (operads, loop spaces, mapping class group, automorphisms of free groups, moduli spaces).

### Education:

- 1994–1998 Licence in Mathematics from Université Libre de Bruxelles.  
(Dissertation: “Extension au cas infini de la théorie des familles bien graduées et des géométries convexes”. Adviser: Prof. J.-P. Doignon.)
- 1998–2001 PhD in Mathematics from Oxford University.  
(Thesis title: “Ribbon braid and related operads”. Adviser: Prof. U. Tillmann.)

### Employment:

- Sept 2001–Dec 2002 Visiting Assistant Professor at Northwestern University.
- Jan 2003–Dec 2004 Assistant Professor at Aarhus University  
(Marie Curie European Fellowship).
- Jan 2005–Jun 2006 L. E. Dickson Instructor at the University of Chicago.
- Jul 2006– Associate Professor at the University of Copenhagen

### Scholarships and Awards

- 1998 Diplôme d’honneur et Médaille de l’Université Libre de Bruxelles.
- 1998–2001 Full graduate scholarship from Wiener-Anspach Foundation.
- 2003–2004 Marie Curie European Fellowship (2 years).
- 2005 Francqui Fellow of the Belgian American Educational Foundation.
- 2005–2008 NSF Research Grant DMS-0504932.
- 2006 (spring) Mittag-Leffler visiting fellowship.
- 2006–2009 Steno fellowship of the Danish Natural Science Research Council.

## Publications and preprints

1. Antimatroids of finite character, *J. Geom.* **70** (2001), 168–175.
2. Monoidal rectification of diagrams, preprint (2002).
3. (with P. Salvatore) Framed discs operads and Batalin-Vilkovisky algebras, *Quart. J. Math.* **54** (2003), 213–231.
4. Infinite loop space structure(s) on the stable mapping class group, *Topology* **43** (2004), 343–368.
5. (with C. Jensen) Automorphisms of free groups with boundaries, *Algebr. Geom. Topol.* **4** (2004), 543–569.
6. (with A. Hatcher) Stabilization for the automorphisms of free groups with boundaries, *Geom. Topol.* **9** (2005), 1295–1336.
7. From mapping class groups to automorphism groups of free groups, *J. London Math. Soc.*(2) **72** (2005) no.2, 510–524.
8. (with A. Hatcher and K. Vogtmann) Erratum to: “Homology stability for outer automorphism groups of free groups” [*Algebr. Geom. Topol.* 4 (2004), 1253–1272] by Hatcher and Vogtmann, *Algebr. Geom. Topol.* **6** (2006), 573–579.
9. Homological stability for mapping class groups of non-orientable surfaces, preprint (2006).
10. (with Allen Hatcher) Stabilization for the automorphisms of free groups with boundaries II, preprint (2006).

**Book review** (for Mathematical Reviews) K. Igusa, *Higher Franz-Reidemeister torsion*, AMS/IP Studies in Advanced Mathematics, AMS, Providence, 2001.

## Conference talks

Operads and Hopf Algebras (Clay Insistute, USA, 07),  
Nordic Conference in Topology (Trondheim, Norway, 06),  
Twisted K-theory, Arbeitsgemeinschaft (Oberwolfach, Germany 06),  
Oberwolfach Topology Meeting (Oberwolfach, Germany, 06),  
Quantum Moduli Spaces and TQFT (Aarhus, Denmark, 06),  
Topology Festival (Cornell, USA, 06),  
Higher Torsion Invariants, Arbeitsgemeinschaft (Oberwolfach, Germany 06),  
String Topology in Morelia (Morelia, Mexico, 06),  
Modern Foundations for Stable Homotopy Theory, Arbeitsgemeinschaft (Oberwolfach, Germany, 05),  
Low Dimensional Manifolds (Oberwolfach, Germany, 05),  
Conference on Pure and Applied Topology (Isle of Skye, UK, 05),  
Midwest Topology Seminar (Univ. of Chicago, USA, 05),  
Topology and Geometry of Moduli Spaces of Curves (AIM, USA, 05),  
AMS Sectional Meeting (Northwestern Univ., USA, 04),  
Oberwolfach Topology Meeting (Oberwolfach, Germany, 04),  
Conference on Algebraic Topology (Arolla, Switzerland, 04),  
String Topology Workshop (Stanford Univ., USA, 04),

Topology of Manifolds and Homotopy Theory (Banff, Canada, 04),  
 Homotopy of Moduli Spaces, Arbeitsgemeinschaft (Oberwolfach, Germany, 03),  
 String Topology Workshop (Stony Brook, USA, 03),  
 Midwest Topology Seminar (Kalamazoo, USA, 02),  
 Barcelona Conference on Algebraic Topology (Barcelona, Spain, 02),  
 International Conference on Homotopy Theory (Northwestern Univ., USA, 02),  
 Transpennine Topology Triangle (Manchester, UK, 02),  
 Mapping Class Groups et Homotopie Stable (Luminy, France, 02),  
 CALF Conference (Brussels, Belgium, 01),  
 British Topology Meeting (Edinburgh, UK, 01),  
 Transpennine Topology Triangle (Leicester, UK, 01),  
 Quantization Deformation in Mathematical Physics (Manchester, UK, 01),  
 Operad Workshop (Osnabrück, Germany, 00),  
 Operaden und ihre Anwendungen, Arbeitsgemeinschaft (Oberwolfach, Germany, 00).

### Seminar talks

Vancouver (07), CUNY (07), Glasgow (07), Mittag-Leffler Institute (06), Utah (05), Zurich (05), Aberdeen (04), Cornell (04), Oslo (04), Stockholm KTH (04), Paris XIII (03), MIT (03,07), Bonn (03), Aarhus (05,04,03), Louvain-la-Neuve (03), Oxford (03), John Hopkins (02), Stanford (05,02), Madison (02), Urbana-Champaign (02), Minnesota (02), Chicago (05,04,03 and 01), Northwestern (05,01), Manchester (01).

### General audience and colloquium talks

Stony Brook Mathematics Colloquium (USA, 07),  
 University of Aalborg Mathematics Colloquium (Denmark, 06),  
 University of Göttingen Graduiertenkolleg Colloquium (Germany, 06),  
 University of Copenhagen Mathematics Colloquium (Denmark, 06),  
 Université Libre de Bruxelles Mathematics Colloquium (Belgium, 04),  
 Wayne State Mathematics Colloquium (USA, 02),  
 Mathematics and Art Conference (Oxford, UK, 00),  
 Merton College MCR-SCR (Oxford, UK, 00).

### Teaching experience

Topics in Algebraic Topology (master level) at the University of Copenhagen,  
 Honors Calculus and Analysis in  $\mathbb{R}^n$  (incl. Linear Algebra) at the Univ. of Chicago,  
 Five quarter courses (Calculus) at Northwestern University,  
 Teaching Diploma (“Agrégation de l’enseignement secondaire supérieur”) obtained  
 in 1998 from Université Libre de Bruxelles.

### **Other academic functions**

Referee for several journals including Geometry and Topology, Geometriae Dedicata.

Organizer of conferences:

- The First Copenhagen Topology Conference (Copenhagen, Denmark, 06).
- Midwest Topology Seminar (Chicago, USA, 05).
- CALF Meeting (ULB, Belgium, 01)

Organizer of the Topology Seminar at the University of Chicago and of Copenhagen.