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VITA

BORN:

- September 17, 1973, Millau, France

EDUCATION:

- 1991 – *Baccalauréat* – Toulouse.
- 1991-1999 – Student at Université Paul Sabatier, Toulouse 3.
- June 1999 – *Thèse de doctorat* (Ph. D.) – Université de Toulouse 3
- May 2003 – *Habilitation à diriger les recherches* (Habilitation thesis) – Université de Nice.

ACADEMIC POSITIONS:

- September 1999 - February 2001 : Postdoc at Max Planck Institute für Mathematik in Bonn.
- 2001-2003 *Chargé de recherches au C.N.R.S.* (permanent research position) in Laboratoire J.A. Dieudonné (Nice).
- 2003-2009 : *Chargé de recherches au C.N.R.S.* (permanent research position) in Laboratoire Emile Picard (Toulouse).
- From October 2009: *Directeur de recherches au C.N.R.S.* (permanent research position) in Institut de Mathématiques et de Modélisation de Montpellier.

Ph. D. STUDENTS

- M. Anel: thesis defended in June 2006 (Toulouse). Presently at UQAM (Montréal).
- F. Marty: thesis defended in July 2009 (Toulouse). Presently at MPI (Bonn)
- J. Wallbridge: second year PhD student in Toulouse-Adelaide.
- A. Blanc: first year PhD student in Montpellier

EDITORIAL WORK

I am currently an editor for *Advances in Mathematics* and *Applied Categorical Structures*.

PUBLICATIONS

- (1) *Théorèmes de Riemann-Roch pour les champs de Deligne-Mumford*, *K-theory* **18**, 1999, No. 1 33-76.

- (2) *On motives for Deligne-Mumford stacks*, Internat. Math. Res. Notices **2000**, No. 17, 909-928.
- (3) *Vers une interprétation galoisienne de la théorie de l'homotopie*, Cahiers de Top. et de Geom. Diff. Catégoriques **43**, No. 4 (2002), 257-312.
- (4) (joint with G. Vezzosi) *A remark on K-theory and S-categories*, Topology **43**, No. 4 (2004), 765-791.
- (5) (joint with G. Vezzosi) *From HAG to DAG: derived moduli stacks*, in Axiomatic, enriched and motivic homotopy theory, 173–216, NATO Sci. Ser. II Math. Phys. Chem., 131, Kluwer Acad. Publ., Dordrecht, 2004.
- (6) (joint with G. Vezzosi) *Homotopical Algebraic Geometry I*, Adv. Math. **193** (2005), no. 2, 257–372.
- (7) (joint with J. Kock) *Simplicial localization of monoidal structures, and a non-linear version of Deligne's conjecture*, Compos. Math. **141** (2005), no. 1, 253–261.
- (8) *Vers une axiomatisation de la théorie des catégories supérieures*, K-Theory **34** (2005), no. 3, 233–263.
- (9) *Champs affines*, Selecta Math. **12** (2006), no. 1, 39–135.
- (10) (avec G. Vezzosi) *Homotopical algebraic geometry II: Geometric stacks and applications*, Mem. Amer. Math. Soc. **193** (2008), no. 902, x+224 pp.
- (11) *Derived Hall algebras*, Duke Math. J. **135** (2006), no. 3, 587–615.
- (12) *The homotopy theory of dg-categories and derived Morita theory*, Invent. Math. **167** (2007), no. 3, 615–667.
- (13) (joint with M. Vaquié) *Moduli of objects in dg-categories*, Ann. Sci. de l'ENS Volume **40** (2007) Issue 3, Pages 387-444.
- (14) (joint with G. Vezzosi) *Brave new algebraic geometry*, in *Elliptic cohomology*, 325–359, London Math. Soc. Lecture Note Ser., **342**, Cambridge Univ. Press, Cambridge, 2007.
- (15) (joint with L. Katzarkov and T. Pantev) *Schematic homotopy types and non-abelian Hodge theory*, Compos. Math. **144** (2008), no. 3, 582–632.
- (16) (joint with M. Vaquié) *Under Spec Z*, J. K-Theory **3** (2009), no. 3, 437–500.
- (17) *Finitude homotopique des dg-algèbres propres et lisses*, Proc. Lond. Math. Soc. (3) **98** (2009), no. 1, 217–240.
- (18) (joint with M. Anel) *Dénombrabilité des classes d'équivalences dérivées des variétés algébriques*, J. Algebraic Geom. **18** (2009), no. 2, 257–277.
- (19) *Anneaux de définition des dg-algèbres propres et lisses*, Bull. Lond. Math. Soc. **40** (2008), no. 4, 642–650.
- (20) (joint with M. Vaquié) *Algébrisation des variétés analytiques complexes et catégories dérivées*, Math. Ann. (2008) **342**, 789–831.
- (21) *Higher and derived stacks: a global overview*, Algebraic geometry—Seattle 2005. Part 1, 435–487, Proc. Sympos. Pure Math., **80**, Part 1, Amer. Math. Soc., Providence, RI, 2009.
- (22) (joint with L. Katzarkov and T. Pantev) *Algebraic and topological aspects of the schematization functor*, Compos. Math. **145** (2009), no. 3, 633–686.

## PREPRINTS

- (1) *Anneaux de Grothendieck des n-champs d'Artin*, math.AG/0509098
- (2) (joint with G. Vezzosi) *Segal Topoi and stacks over Segal categories*, math.AG/0212330
- (3) (joint with G. Vezzosi)  *$\infty$ -Catégories monoidales rigides, traces et caractères de Chern*, arXiv:0903.3292

- (4) (joint with G. Vezzosi) *Algèbres simpliciales  $S^1$ -équivariantes et théorie de de Rham*, arXiv:0904.3256

CONFERENCES (as an invited speaker)

- (1) *International conference on intersection theory*, Bologna, December 1999.
- (2) *Algebraic cycles*, Columbus, December 2000.
- (3) *Orbifold String Theory*, Madison, May 2001.
- (4) *Stacks, intersection theory and non-abelian Hodge theory*, MSRI, Berkeley January 2002.
- (5) *Great Lake K-theory Conference 8*, Urbana-Champaign, April 2002.
- (6) *Intersection theory and Moduli*, Trieste, September 2002.
- (7) *Axiomatic, enriched and motivic homotopy theory*, Cambridge, September 2002.
- (8) *Moduli, Lie theory and interactions with physics*, Cortona, June 2003.
- (9) *Homotopy Theory and its Applications*, London Ontario, September 2003.
- (10) *Theory of motives, homotopy theory of varieties, and dessins d'enfants*, Palo Alto, April 2004.
- (11) *N-Categories, foundations and applications*, Minneapolis, June 2004.
- (12) *Groupoids and Stacks in Physics and Geometry*, Luminy, June 2004.
- (13) *24th Nordic and 1st Franco-Nordic Congress of Mathematicians*, Reykjavik, January 2005.
- (14) *Algebraic Geometry and Categories, On the occasion of André Hirschowitz's 61st birthday*, Nice, June 2005.
- (15) *Conference on Algebraic Topology*, Cracow, June 2005.
- (16) *The Arithmetic of Structured Ring Spectra*, Rosendal (Norway), August 2005.
- (17) *Summer Institute in Algebraic Geometry*, Seattle, July-August 2005.
- (18) *EMS-SCM Joint Mathematical Weekend*, Barcelona, September 2005.
- (19) *Mathematics and its applications, SMF-UMI joint meeting*, Turin, July 2006.
- (20) *Développements récents de la théorie des algèbres de Hall*, CIRM, Luminy, Novembre 2006.
- (21) *Géométrie algébrique sur le corps à un élément*, IHES, Paris, Mars 2007.
- (22) *Derived categories, non-commutative geometry and strings*, Dublin, April 2007.
- (23) *Stacks in geometry and topology*, Toronto, May 2007.
- (24) *Interactions with algebraic geometry*, Firenze, May-June 2007.
- (25) *Conférence de géométrie algébrique* (en l'honneur du sixantième anniversaire d'Arnaud Beauville), Paris, June 2007.
- (26) *The Abel Symposium*, Oslo, August 2007.
- (27) *Categorical aspects of algebraic geometry in mirror symmetry*, RIMS, Kyoto, December 2007.
- (28) *New connections of representation theory to algebraic geometry and physics*, IAS, Princeton, March 2008.
- (29) *Conférence de mathématiques du cycle scientifique du Cinquantenaire de l'IHES*, IHES, Paris, Mai 2008.

- (30) *Homotopical Group Theory and Topological Algebraic Geometry*, Conference in honour of Haynes Miller, on the occasion of his 60th birthday, Bonn, June 2008.
- (31) *Homotopy Structures in Geometry and Algebra; Derived Categories, Higher Categories*, CRM, Barcelona, July 2008.
- (32) *Workshop on triangulated categories*, Swansea, December 2008.
- (33) *Aspects de la géométrie algébrique: la postérité mathématique de Grothendieck*, IHES, January 2009.

#### ADVANCED COURSES

- (1) *Winter school on K-theory*, Sedano, January 2007.
- (2) *Simplicial methods in higher categories*, CRM, Barcelona, February 2008.