

# Najib Idrissi

## Curriculum Vitæ

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March 6, 2019

### Academic Career

- Since 09/2018 **Maître de conférences**, *Université Paris Diderot / Institut de Mathématiques de Jussieu-Paris Rive Gauche*, Paris, France.
- 02/2018–08/2018 **Postdoctoral researcher**, *ETH Zürich / D-MATH*, Zürich, Switzerland.  
Group of Thomas Willwacher. Funded by ERC StG 678156–GRAPHCPX.
- 09/2015–01/2018 **Doctorate in Mathematics**, *Université Lille 1 / Laboratoire Paul Painlevé*, Lille, France.  
Thesis defended on November 17th, 2017. Advisor: Benoit Fresse.  
Title: *Operadic Formality and Homotopy of Configuration Spaces*.
- 09/2011–08/2015 **Élève fonctionnaire stagiaire**, *École Normale Supérieure de Paris*, Paris, France.  
Ranked 1<sup>st</sup> on the “INFO” competitive entrance exam.  
2014–2015: Research internship in preparation of a PhD, Université Lille 1.  
2013–2014: Master’s degree in Fundamental Mathematics, Université Paris Diderot.  
Fall 2013: Research internship in algebraic topology, Massachusetts Institute of Technology.

### Research

#### Publications

- [1] Najib Idrissi. “The Lambrechts–Stanley Model of Configuration Spaces”. In: *Invent. Math.* (2018), pp. 1–68. ISSN: 1432-1297. DOI: 10.1007/s00222-018-0842-9. arXiv: 1608.08054. In press.
- [2] Najib Idrissi. “Swiss-Cheese operad and Drinfeld center”. In: *Israel J. Math.* 221.2 (2017), pp. 941–972. DOI: 10.1007/s11856-017-1579-7. arXiv: 1507.06844.

#### Preprints

- [3] Ricardo Campos, Julien Ducoulombier, Najib Idrissi, and Thomas Willwacher. *A model for framed configuration spaces of points*. 2018. arXiv: 1807.08319. Submitted. 27 pp.
- [4] Ricardo Campos, Najib Idrissi, Pascal Lambrechts, and Thomas Willwacher. *Configuration Spaces of Manifolds with Boundary*. 2018. arXiv: 1802.00716. Submitted. 107 pp.
- [5] Najib Idrissi. *Curved Koszul Duality for Algebras over Unital Operads*. 2018. arXiv: 1805.01853. Submitted. 33 pp.
- [6] Najib Idrissi. *Formality of a higher-codimensional Swiss-Cheese operad*. 2018. arXiv: 1809.07667. Submitted. 40 pp.

#### Other documents

- [7] Najib Idrissi. “Formalité opéradique et homotopie des espaces de configuration”. PhD thesis. Université Lille 1, Nov. 17, 2017. 173 pp. URL: <http://ori.univ-lille1.fr/notice/view/univ-lille1-ori-455595>.
- [8] Najib Idrissi. “Opérades et Structures Commutatives à Homotopie Près”. In: *Grad. J. Math.* 1.1 (2016), pp. 9–17. ISSN: 1737-0299. URL: <http://www.gradmath.org/article/opérades-et-structures-commutatives-a-homotopie-pres/>.
- [9] Najib Idrissi. “Homologie et complexes de déformations d’opérades  $E_n$ ”. Master’s thesis. Université Paris Diderot, 2014.

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## Service

- Since 10/2018 **One of the organizers of the Topology Seminar**, *Institut de Mathématiques de Jussieu-Paris Rive Gauche*, Paris, France.
- 2019 **Organization of a working seminar on homological stability**, *Institut de Mathématiques de Jussieu-Paris Rive Gauche*, Paris, France.
- 10/2017 **Participation to the organization of the introductory day for young researchers**, *Colloque 2017 du GDR Topologie Algébrique*, Paris, France.
- 2016–2017 **One of the organizers of the PhD students' seminar**, *Laboratoire Paul Painlevé*, Lille, France.
- ongoing **Peer reviews**.  
Algebraic & Geometric Topology, Communications in Mathematical Physics, Letters in Mathematical Physics, Royal Society of Edinburgh: Proceedings A, Selecta Mathematica
- ongoing **Writing of abstracts for Zentralblatt MATH**.

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## Funding

### Obtained

- 2019 Lead of an *Exploratory Project for First Support “Young Researcher”* (PEPS JCJC), CNRS / Insmi, 3500 €.
- 2015–2018 Specific doctoral contract “*normalien*”, École Normale Supérieure de Paris.
- 05/2016 Travel grant “Oberwolfach Leibniz Graduate Students” (for the workshop “Factorization Algebras and Functorial Field Theories”).

### Participation

- 2014–2015 Member of the ANR project “*Homotopie algébrique, Opérades et groupes de Grothendieck-Teichmüller*” (coordinator: Benoit Fresse).

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## Research visits

- 06/2019\* (5 d.) ETH Zurich – Thomas Willwacher.
- 06/2018 (10 d.) University of Regina – Don Stanley.
- 08/2017 (5 d.) ETH Zurich – Thomas Willwacher.
- 01/2017 (5 d.) Université catholique de Louvain – Pascal Lambrechts.
- 06/2016 (4 d.) ETH Zurich – Thomas Willwacher.

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## Talks

### Invited

- 05/2019\* **Higher Homotopy Algebras in Topology**, *MPIM*, Bonn, Germany.
- 01/2019 **Higher Structures**, *Centre international de rencontres mathématiques (CIRM)*, Luminy, France.  
Configuration spaces and operads
- 06/2018 **Derived Geometry and Higher Categorical Structures in Geometry and Physics (junior speaker at the summer school)**, *Fields Institute*, Toronto, Canada.  
Curved Koszul Duality for Algebras over Unital Operads
- 05/2018 **Graph Complexes, Configuration Spaces and Manifold Calculus**, *University of British Columbia*, Vancouver, Canada.  
Configuration Spaces of Manifolds with Boundary
- 10/2017 **Séminaire Itinérant de Catégories**, *Université du Littoral Côte d'Opale*, Calais, France.  
L'opérade Swiss-Cheese et le centre de Drinfeld

- 10/2016 **Conference in the honour of Saïd Zarati**, *Institut des Hautes Études à Tunis (IHET)*, Tunis, Tunisia.  
The Lambrechts–Stanley Model of Configuration Spaces
- Contributed**
- 07/2017 **Young Topologists Meeting 2017**, *Stockholm Universitet & KTH*, Stockholm, Sweden.  
The Lambrechts–Stanley Model of Configuration Spaces
- 02/2017 **Conference for Young researchers in homotopy theory and categorical structures**, *MPIM*, Bonn, Germany.  
The Lambrechts–Stanley Model of Configuration Spaces
- 10/2016 **2016 Meeting of the GDR Algebraic Topology and Applications**, *Université de Picardie Jules Verne / LAMFA*, Amiens, France.  
The Lambrechts–Stanley Model of Configuration Spaces
- Seminars**
- 12/2018 **Stockholm Topology Seminar**, *Stockholm Universitet & KTH*, Stockholm, Sweden.  
Configuration spaces and Operads
- 11/2018 **Geometry & Topology Seminar**, *IMJ-PRG*, Paris, France.  
Espaces de configuration et Opérades
- 06/2018 **Colloque du département**, *University of Regina*, Regina (SK), Canada.  
Configuration Spaces and Graphs Complexes
- 12/2017 **Topology, Geometry, and Algebra seminar**, *Université de Nantes*, Nantes, France.  
Espaces de configuration de variétés compactes
- 12/2017 **Algebra and Topology seminar**, *Université de Strasbourg*, Strasbourg, France.  
Espaces de configuration de variétés compactes
- 11/2017 **Mathematical Physics and Algebraic Topology Seminar**, *Université d'Angers*, Angers, France.  
Espaces de configuration de variétés compactes
- 11/2017 **Homotopy in Algebraic Geometry Seminar**, *Université Paul Sabatier*, Toulouse, France.  
Espaces de configuration de variétés compactes
- 10/2017 **Singular Spaces Geometry Seminar**, *Université Lille 1*, Lille, France.  
Introduction à la théorie de l'homotopie rationnelle
- 10/2017 **Singular Spaces Geometry Seminar**, *Université Lille 1*, Lille, France.  
L'opérade Swiss-Cheese et le centre de Drinfeld
- 08/2017 **Talks in mathematical physics**, *ETH Zürich*, Zürich, Switzerland.  
Configuration Spaces of Compact Manifolds
- 05/2017 **Singular Spaces Geometry Seminar**, *Université Lille 1*, Lille, France.  
Le modèle de Lambrechts–Stanley des espaces de configuration
- 05/2017 **Singular Spaces Geometry Seminar**, *Université Lille 1*, Lille, France.  
La compactification de Fulton-MacPherson des espaces de configuration
- 01/2017 **Algebraic Topology Seminar**, *Université Catholique de Louvain / Institut de recherche en mathématique et physique*, Louvain-la-Neuve, Belgium.  
Le modèle de Lambrechts–Stanley des espaces de configuration
- 11/2016 **Algebraic Topology Seminar**, *Université Paris 13*, Paris, France.  
Le modèle de Lambrechts–Stanley des espaces de configuration
- 09/2016 **Topology Seminar**, *Université Lille 1*, Lille, France.  
Le modèle de Lambrechts–Stanley des espaces de configuration
- 06/2016 **Talks in Mathematical Physics**, *ETH Zürich*, Zürich, Switzerland.  
Swiss-Cheese operad and Drinfeld center

- 04/2016 **Topology Seminar**, *IMJ-PRG*, Paris, France.  
L'opérade Swiss-Cheese et le centre de Drinfeld
- 12/2015 **PhD students' seminar**, *Université Lille 1 / Laboratoire Paul Painlevé*, Lille, France.  
Opérades
- 12/2015 **PhD students' seminar**, *Université de Picardie Jules Verne / LAMFA*, Amiens, France.  
Opérades
- 10/2015 **Algebraic Topology seminar**, *Université Catholique de Louvain / Institut de recherche en mathématique et physique*, Louvain-la-Neuve, Belgium.  
L'opérade Swiss-Cheese et le centre de Drinfeld
- 09/2015 **Topology Seminar**, *Université Lille 1 / Laboratoire Paul Painlevé*, Lille, France.  
L'opérade Swiss-Cheese et le centre de Drinfeld

## Teaching

- 2018–2019 Elementary Algebra and Analysis 1, L1 MIASHS (lecture+exercises, 90h); Elementary Algebra and Analysis 2, L1 Chemistry (exercises, 36h).
- 2017–2018 Calculus 1, L1 MASS (exercises, 36h); Fundamental mathematics 1, L1 SESI (oral exams & tutoring, 10h).
- 2016–2017 Matrix calculus, L2 econ-management (exercises, 36h); Calculus 1, L1 econ-management (exercises, 15h); Calculus 1, L1 MASS (exercises, 15h).
- 2015–2016 Fundamental mathematics 2, L1 SESI (exercises, 66h).

## Conferences, workshops and thematic schools attended

- 06/2019\* SYM 10 Years Old @ Københavns Universitet.
- 05/2019\* Higher Homotopy Algebras in Topology @ MPIM Bonn.
- 01/2019 Higher Structures @ Centre international de rencontres mathématiques (CIRM, Luminy).
- 01/2019 Higher Structures in Holomorphic and Topological Field Theory @ Institut des Hautes Études Scientifiques.
- 10/2018 New trends in K-theory and homotopy theory – A conference in honor of Max Karoubi's 80th birthday @ Institut Henri Poincaré.
- 10/2018 Colloque 2018 du GDR Topologie Algébrique @ Université de Montpellier.
- 06/2018 Derived Geometry and Higher Categorical Structures in Geometry and Physics @ Fields Institute.
- 05/2018 Graph Complexes, Configuration Spaces and Manifold Calculus @ University of British Columbia.
- 01/2018 Rational Homotopy and its Applications @ Université de Lille.
- 10/2017 Colloque 2017 du GDR Topologie Algébrique @ Université Paris 7.
- 10/2017 Séminaire Itinérant de Catégories @ Université du Littoral Côte d'Opale.
- 09/2017 Journée des doctorants du Nord-Pas-de-Calais @ Université du Littoral Côte d'Opale.
- 07/2017 Workshop on Persistent Homology @ Université de Montpellier.
- 07/2017 Young Topologists Meeting 2017 @ Stockholm Universitet & KTH.
- 06/2017 Algebraic Topology and Representation Theory @ Université de Lille.
- 06/2017 Derived Algebraic Geometry and Interactions @ Université de Toulouse.
- 06/2017 Fourth Young Mathematicians Colloquium @ Vrije Universiteit Brussel.
- 05/2017 Lens Topology and geometry 2017 @ Université d'Artois (Lens).
- 03/2017 Workshop on Quantum Topology @ Université Lille 1.

- 02/2017 Conference for Young researchers in homotopy theory and categorical structures @ MPIM Bonn.
  - 10/2016 Conference in the honour of Saïd Zarati @ IHET (Tunis).
  - 10/2016 Colloque 2016 du GDR Topologie Algébrique et Applications @ Université de Picardie Jules Verne.
  - 07/2016 Young Topologists Meeting 2016 @ Københavns Universitet.
  - 05/2016 Workshop: Factorization Algebras and Functorial Field Theories @ Mathematisches Forschungsinstitut Oberwolfach.
  - 03/2016 Séminaire Itinérant de Catégories @ Université Lille 1.
  - 10/2015 Colloque 2015 du GDR Topologie Algébrique et Applications @ Université de Toulouse-3.
  - 06/2015 Lens Topology and geometry 2015 @ Université d'Artois (Lens).
  - 05/2015 Introductory School – Homotopy theory, manifolds, and field theories @ Hausdorff Research Institute for Mathematics.
  - 03/2015 Séminaire du projet ANR HOGT @ Université de Strasbourg.
  - 03/2015 Second Young Mathematicians Colloquium @ KU Leuven Kulak.
  - 03/2015 Séminaire Itinérant de Catégories @ Université du Littoral Côte d'Opale (Calais).
  - 02/2015 Masterclass : K-théorie topologique et applications @ Université de Strasbourg.
  - 01/2015 Séminaire du projet ANR HOGT @ Université Lille 1.
  - 10/2014 Colloque 2014 du GDR Topologie Algébrique et Applications @ Université Blaise Pascal.
  - 09/2014 Colloque de clôture du projet ANR HOGT @ Université de Nice.
  - 09/2014 Espaces des lacets en géométrie et topologie @ Université de Nantes.
  - 06/2014 Young Topologists Meeting 2014 @ Københavns Universitet.
  - 05/2014 Young Mathematicians Colloquium @ Université Lille 1.
  - 01/2014 Séminaire du projet ANR HOGT @ Université Lille 1.
  - 09/2013 Gelfand Centennial Conference: A View of 21st Century Mathematics @ Massachusetts Institute of Technology.
  - 05/2013 Conference in Algebra and Topology celebrating Lionel Schwartz's sixtieth birthday @ Université de Nantes.
- (\*: Future).