# Najib Idrissi

Curriculum Vitæ

Université Paris Diderot - IMJ-PRG
8 place Aurélie Nemous
F-75013 Paris, France
☎ (+33) 01 57 27 91 16
☑ najib.idrissi-kaitouni@imj-prg.fr
└⑪ idrissi.eu/en
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# Career

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.

Supervisor: Thomas Willwacher. Funded by ERC StG 678156-GRAPHCPX.

09/2015-01/2018 **Doctorate in Mathematics**, *Université Lille 1 / Laboratoire Paul Painlevé*, Lille, France.

Funded by an Allocation Spécifique of the ENS. Thesis defended on November 17th, 2017. Advisor: Benoit Fresse. Title: Operadic Formality and Homotopy of Configuration Spaces.

09/2011-08/2015 **Élève**, École Normale Supérieure de Paris, Paris, France.

Ranked 1st 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] N. I. "The Lambrechts-Stanley Model of Configuration Spaces". In: *Invent. Math* (2018). In press. ISSN: 1432-1297. DOI: 10.1007/s00222-018-0842-9. arXiv: 1608.08054.
- [2] N. I. "Swiss-Cheese operad and Drinfeld center". In: *Israel J. Math* 221.2 (2017), pp. 941–972. ISSN: 1565-8511. DOI: 10.1007/s11856-017-1579-7. arXiv: 1507.06844.

# **Preprints**

- [3] N. I. Formality of a higher-codimensional Swiss-Cheese operad. Preprint, 40 pages. Sept. 20, 2018. arXiv: 1809.07667.
- [4] Ricardo Campos, Julien Ducoulombier, N. I., and Thomas Willwacher. A model for framed configuration spaces of points. Preprint, 27 pages. July 22, 2018. arXiv: 1807.08319.
- [5] N. I. Curved Koszul Duality for Algebras over Unital Operads. Preprint, 32 pages. May 4, 2018. arXiv: 1805.01853.
- [6] Ricardo Campos, N. I., Pascal Lambrechts, and Thomas Willwacher. *Configuration Spaces of Manifolds with Boundary*. Preprint, 107 pages. Feb. 2, 2018. arXiv: 1802.00716.

# Other documents

- [7] N. I. "Formalité opéradique et homotopie des espaces de configuration". PhD thesis. Université de Lille, Nov. 17, 2017. URL: http://ori.univ-lille1.fr/notice/view/univ-lille1-ori-455595.
- [8] N. I. "Opérades et Structures Commutatives à Homotopie Près". In: *Graduate J. Math* 1.1 (2016), pp. 9-17. URL: http://www.gradmath.org/article/operades-et-structures-commutatives-a-homotopie-pres/.
- [9] N. I. "Homologie et complexes de déformations d'opérades  $E_n$ ". MA thesis. Université Paris Diderot, 2014.

# Teaching

2018–2019 Elementary Algebra and Analysis I, L1 MIASHS (lecture+exercises); Elementary Algebra and Analysis II, L1 Chemistry (exercises)

2017-2018 Calculus I, L1 MASS (exercises); Fundamental mathematics I, L1 SESI (oral exams & tutoring)

2016–2017 Matrix calculus, L2 econ-management (exercises); Calculus I, L1 econ-management (exercises); Calculus I, L1 MASS (exercises)

# **Projets**

First Support Exploratory Project "Young Researcher" (PEPS JCJC), Institut National des Sciences Mathématiques et de leurs Interactions, CNRS, France. 3500 €.

## Service

- 2018- **One of the organizers of the Topology Seminar**, *Institut de Mathématiques de Jussieu-Paris Rive Gauche*, Paris, France.
  - Webpage: www.imj-prg.fr/spip.php?article67
- 2018 Writing of abstracts for Zentralblatt MATH.
- 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 organizer of the PhD students' seminar, Laboratoire Paul Painlevé, Lille, France.

## **Talks**

## Invited

- 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 (IHET)*, Tunis, Tunisia. The Lambrechts-Stanley Model of Configuration Spaces

#### Contributed

07/2017 **Young Topologists Meeting 2017**, Stockholm University + Royal Institute of Technology (KTH), Stockholm. Sweden.

The Lambrechts-Stanley Model of Configuration Spaces

02/2017 Conference for Young researchers in homotopy theory and categorical structures, MPIM Bonn, 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 University + Royal Institute of Technology (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, <i>Université de Strasbourg</i> , 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	<b>Singular Spaces Geometry Seminar</b> , <i>Université Lille</i> 1, Lille, France. L'opérade Swiss-Cheese et le centre de Drinfeld
08/2017	<b>Talks in mathematical physics</b> , <i>ETH Zürich</i> , Zürich, Switzerland. Configuration Spaces of Compact Manifolds
05/2017	Singular Spaces Geometry Seminar, <i>Université Lille 1</i> , Lille, France. Le modèle de Lambrechts-Stanley des espaces de configuration
05/2017	<b>Singular Spaces Geometry Seminar</b> , <i>Université Lille 1</i> , Lille, France. La compactification de Fulton-MacPherson des espaces de configuration
01/2017	Algebraic Topology Seminar, Université Catholique de Louvain – Institut de recherche en mathé matique 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	<b>Topology Seminar</b> , <i>Université Lille</i> 1, Lille, France. Le modèle de Lambrechts-Stanley des espaces de configuration
06/2016	<b>Talks in Mathematical Physics</b> , <i>ETH Zürich</i> , Zürich, Switzerland. Swiss-Cheese operad and Drinfeld center
04/2016	<b>Topology Seminar</b> , <i>IMJ-PRG</i> , Paris, France. L'opérade Swiss-Cheese et le centre de Drinfeld
12/2015	<b>PhD students' seminar</b> , <i>Université Lille 1 – Laboratoire Paul Painlevé</i> , Lille, France. Opérades
12/2015	<b>PhD students' seminar</b> , <i>Université de Picardie Jules Verne – LAMFA</i> , 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	<b>Topology Seminar</b> , <i>Université Lille 1 – Laboratoire Paul Painlevé</i> , Lille, France. L'opérade Swiss-Cheese et le centre de Drinfeld
(*:	Future)
	Conferences, workshops and thematic schools attended
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 (Paris-Saclay)
10/2018	New trends in K-theory and homotopy theory – A conference in honor of Max Karoubi's 80th birthday @ Institut Henri Poincaré (Paris)
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 (Toronto)

Graph Complexes, Configuration Spaces and Manifold Calculus @ University of British Columbia

05/2018

(Vancouver)

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 (Calais)
09/2017	Journée des doctorants du Nord-Pas-de-Calais @ Université du Littoral Côte d'Opale (Calais)
07/2017	Workshop on Persistent Homology @ Université de Montpellier
07/2017	Young Topologists Meeting 2017 @ Stockholm University + Royal Institute of Technology (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 (Amiens)
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 (Clermont-Ferrand)
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)