# Najib Idrissi

*Curriculum Vitæ*

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## Academic Career

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| Since Sept. 2018 | **Maître de conférences**, *Université de Paris & Institut de Mathématiques de Jussieu–Paris Rive Gauche (IMJ-PRG)*, Paris, France. |
| Feb. 2018–Aug. 2018 | **Postdoctoral researcher**, *ETH Zürich*, Zürich, Switzerland. Group of Thomas Willwacher. Funded by ERC StG 678156–GRAPHCPX. |
| Sept. 2015–Jan. 2018 | **Doctorate in Mathematics**, *Université de Lille & Laboratoire Paul Painlevé*, Lille, France. Advisor: Benoit Fresse. Title: *Operadic Formality and Homotopy of Configuration Spaces*. Thesis defended on November 17th, 2017. |
| Sept. 2011–Aug. 2015 | **Élève de l'École Normale Supérieure**, *ENS Ulm*, Paris, France. 2014–2015: Research internship in preparation of a doctorate, Université de Lille. 2013–2014: Master's degree in Fundamental Mathematics, Université Paris Diderot. Fall 2013: Research internship in algebraic topology, Massachusetts Institute of Technology. |
| 2009–2011 | **Classes prépas (MPSI/MPE)**, *Lycée Henri Wallon*, Valenciennes, France. |

## Awards

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| 2019–2020 | **Peccot Lecture**, *Collège de France – Fondation Claude-Antoine Peccot*, Paris, France. "[…] rewards each year young mathematicians under 30 who have been noticed in theoretical or applied mathematics" |

## Research

### Publications

[1] Ricardo Campos, Julien Ducoulombier, and Najib Idrissi. "Boardman–Vogt resolutions and bar/cobar constructions of (co)operadic (co)bimodules." In: *High. Struct.* (2021). arXiv: `1911.09474`. Forthcoming.

[2] Najib Idrissi. "Formality of a higher-codimensional Swiss-Cheese operad." In: *Algebr. Geom. Topol.* (2020). arXiv: `1809.07667`. Forthcoming.

[3] Najib Idrissi. "The Lambrechts–Stanley Model of Configuration Spaces." In: *Invent. Math* 216.1 (2019), pp. 1–68. ISSN: 1432-1297. DOI: `10.1007/s00222-018-0842-9`. arXiv: `1608.08054`.

[4] 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

[5] Najib Idrissi. *Real Homotopy of Configuration Spaces*. Cours Peccot. 2021. 164 pp. Pre-published.

[6] Ricardo Campos, Najib Idrissi, and Thomas Willwacher. *Configuration Spaces of Surfaces*. Version 2. 2019. arXiv: `1911.12281`. Pre-published. 50 pp.

[7] Ricardo Campos, Julien Ducoulombier, Najib Idrissi, and Thomas Willwacher. *A model for framed configuration spaces of points*. 2018. arXiv: `1807.08319`. Pre-published. 27 pp.

[8] Ricardo Campos, Najib Idrissi, Pascal Lambrechts, and Thomas Willwacher. *Configuration Spaces of Manifolds with Boundary*. 2018. arXiv: `1802.00716`. Pre-published. 107 pp.

[9] Najib Idrissi. *Curved Koszul duality of algebras over unital versions of binary operads*. Version 3. 2018. arXiv: `1805.01853`. Pre-published. 33 pp.

### Other documents

[10]  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.

[11]  Najib Idrissi. "Homologie et complexes de déformations d'opérades $E_n$." Master's thesis. Université Paris Diderot, 2014.

## Funding

### Obtained

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| 2019 | Holder of an *Exploratory Project for First Support "Young Researcher (PEPS JCJC)"*, CNRS / Insmi, 3500 €. |
| Sept. 2015–Jan. 2018 | Specific doctoral contract "*normalien*", École Normale Supérieure de Paris. |

### Member

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| 2021–2024 | Member of the ANR project "Higher Algebra, Geometry, and Topology (HighAGT)". Coordinator: Bruno Vallette.. |
| 2014–2015 | Member of the ANR project "*Homotopie algébrique, Opérades et groupes de Grothendieck–Teichmüller (HOGT)*". Coordinator: Benoit Fresse. |

## Supervision

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| 2020–2021 | **Marie-Camille Delarue**, *Master's thesis*, Sorbonne Université / ENS. |
| | **Yasamin Jalalian**, *Bachelor thesis*, École Polytechnique. Title: *Lie algebras and the PBW theorem*. Defense on April 22$^{nd}$, 2021. |

## Service

### Organization

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| Since Oct. 2018 | **One of the organizers of the Topology Seminar**, *Institut de Mathématiques de Jussieu-Paris Rive Gauche*. |
| Jan. 2019–June 2019 | **Organization of a reading seminar on homological stability**, *Institut de Mathématiques de Jussieu-Paris Rive Gauche*. |
| Oct. 2017 | **Participation to the organization of the introductory day for young researchers**, *Colloque 2017 du GDR Topologie Algébrique*, Paris. |
| 2016–2017 | **One of the organizers of the PhD students' seminar**, *Laboratoire Paul Painlevé*, Lille. |

### Committees

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| Jan. 2020 | **PhD committee of Erica Minuz (advisor: Marcel Bökstedt)**, *Aarhus University*. |
| Sept. 2019 | **Master's memoir committee of Basile Coron (advisor: Thomas Willwacher)**, *Sorbonne Université / ETH Zürich*. |
| 2018–2019 | **Exam committee for L1 MIASHS**, *Université de Paris*. |

### Other

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| June 2021– | **Contribution au développement du projet `ical-ufr`**, *Université de Paris*, UFR de Mathématiques. Display of the schedules of Bachelors and Masters in a format readable by humans. I mainly took care of the part visible by users, written in JavaScript/React. https://gitlab.math.univ-paris-diderot.fr/molin/ical-ufr |
| ongoing | **Peer reviews (reports and/or opinions)**. Adv. Math. • Alg. Geom. Topol. • Comm. Math. Phys. • Compos. Math. • Geom. Topol. • Homol. Homot. Appl. • J. Algebra • J. Éc. Polytech. Math. • J. Homotopy Relat. Struct. • J. Lond. Math. Soc. • Lett. Math. Phys. • Proc. Roy. Soc. Edinburgh Sect. A • Selecta Math. |
| ongoing | **Writing of abstracts for Zentralblatt MATH**. |

## Talks

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|---|---|
| Oct. 2021? | **Colloque 2021 du GDR Topologie Algébrique**, *Université de Strasbourg*. |
| June 2021 | **Séminaire de l'équipe Topologie Algébrique**, *Université Sorbonne Paris-Nord*. |
| June 2021 | **Viva Talbot**, *MIT*, online. |

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| June 2021 | **~~Barcelona Conference on Higher Structures~~**, *Centre de Recerca Matemàtica (CRM)*, postponed to 2022. |
| May 2021 | **Algebra and Topology Seminar**, *Københavns Universitet*, online. |
| May 2021 | **Topology and Geometry seminar**, *University of Haifa*, online. |
| Mar. 2021 | **Topology Seminar**, *Massachusetts Institute of Technology (MIT)*, online. |
| Feb. 2021 | **Research Seminar on Algebraic Topology**, *Universität Hamburg*, online. |
| Jan. 2021 | **Séminaire Algèbre et topologie**, *Université de Strasbourg*, online. |
| Oct. 2020 | **Topology seminar**, *Northeastern University*, online. |
| Apr. 2020 | **Toric Topology Research Seminar**, *Institut Fields*, online. |
| Feb. 2020 | **Málaga & Topology Meeting**, *Universidad de Málaga*. |
| Jan. 2020 | **Seminar**, *Aarhus Universitet*. |
| Dec. 2019 | **Opening workshop of the OCHoTop project**, *École Polytechnique Fédérale de Lausanne (EPFL)*. |
| Nov. 2019 | **Journée de topologie**, *Université de Picardie Jules Verne*. |
| July 2019 | **Algebraic Topology Seminar**, *Université catholique de Louvain*. |
| May 2019 | **Higher Homotopy Algebras in Topology**, *Max-Planck-Institut für Mathematik (MPIM)*. |
| May 2019 | **Topology Seminar**, *Institut de Mathématiques de Jussieu–Paris Rive Gauche*. |
| Jan. 2019 | **Higher Structures**, *Centre International de Rencontres Mathématiques (CIRM)*. |
| Dec. 2018 | **Stockholm Topology Seminar**, *Stockholm Universitet & KTH*. |
| Nov. 2018 | **Geometry & Topology Seminar**, *Institut de Mathématiques de Jussieu–Paris Rive Gauche*. |
| June 2018 | **Derived Geometry and Higher Categorical Structures in Geometry and Physics (junior speaker)**, *Fields Institute*. |
| June 2018 | **Colloque du département**, *University of Regina*. |
| May 2018 | **Graph Complexes, Configuration Spaces and Manifold Calculus**, *University of British Columbia*. |
| Dec. 2017 | **Topology, Geometry, and Algebra seminar**, *Université de Nantes*. |
| Dec. 2017 | **Algebra and Topology seminar**, *Université de Strasbourg*. |
| Nov. 2017 | **Mathematical Physics and Algebraic Topology Seminar**, *Université d'Angers*. |
| Nov. 2017 | **Homotopy in Algebraic Geometry Seminar**, *Université Paul Sabatier*. |
| Oct. 2017 | **Singular Spaces Geometry Seminar (× 2)**, *Université de Lille*. |
| Oct. 2017 | **Séminaire Itinérant de Catégories**, *Université du Littoral Côte d'Opale*. |
| Aug. 2017 | **Talks in mathematical physics**, *ETH Zürich*. |
| July 2017 | **Young Topologists Meeting 2017**, *Stockholm Universitet & KTH*. |
| May 2017 | **Singular Spaces Geometry Seminar (× 2)**, *Université de Lille*. |
| Feb. 2017 | **Conference for Young researchers in homotopy theory and categorical structures**, *Max-Planck-Institut für Mathematik (MPIM)*. |
| Jan. 2017 | **Algebraic Topology Seminar**, *Université catholique de Louvain*. |
| Nov. 2016 | **Algebraic Topology Seminar**, *Université Paris 13*. |
| Oct. 2016 | **Conference in the honour of Saïd Zarati**, *Institut des Hautes Études à Tunis*. |
| Oct. 2016 | **2016 Meeting of the GDR Algebraic Topology and Applications**, *Université de Picardie Jules Verne*. |
| Sept. 2016 | **Topology Seminar**, *Université de Lille*. |
| June 2016 | **Talks in Mathematical Physics**, *ETH Zürich*. |
| Apr. 2016 | **Topology Seminar**, *Institut de Mathématiques de Jussieu–Paris Rive Gauche*. |
| Dec. 2015 | **PhD students' seminar**, *Université de Lille*. |
| Dec. 2015 | **PhD students' seminar**, *Université de Picardie Jules Verne*. |
| Oct. 2015 | **Algebraic Topology seminar**, *Université catholique de Louvain*. |
| Sept. 2015 | **Topology Seminar**, *Université de Lille*. |

## Teaching

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| 2021–2022 | *Homotopy II*, M2 Fundam. Math (lectures, 24 h). |
| | *Algorithms and Programming*, L2 (Exercise sessions & Labs, 42 h). |
| | Mathematical Reasoning 2, L1 MIASHS (lectures, organisation, exercise sessions, 18+5+18 h). |
| | *Affine and Euclidean geometry 5*, L3 Maths (exercise sessions, 18 h). |
| | *Elementary mathematics 1*, L1 (exercise sessions, 54 h). |
| 2020–2021 | *Homotopy II*, M2 Fundam. Math (lectures, 24 h). |
| | *Elementary Algebra and Analysis 1 + Mathematical Reasoning 1*, L1 Maths (lecture+exercises, 56.5 h). |
| | *Elementary Algebra and Analysis 2*, L1 Chemistry (exercises, 36 h). |
| | *Algorithms and Programming*, L2 (Exercise sessions & Labs, 42 h). |
| 2019–2020 | *Real Homotopy of Configuration Spaces*, Peccot Lecture, Collège de France (8 h). |
| | *Introduction to Homotopy Theory*, M2 Fundam. Math (lectures, 24 h). |
| | *Elementary Algebra and Analysis 1 + Mathematical Reasoning 1*, L1 MIASHS (lecture+exercises, 56.5 h). |
| | *Elementary Algebra and Analysis 2*, L1 Chemistry (exercises, 36 h). |
| | *Algorithms and Programming*, L2 Maths (Exercise sessions & Labs, 42 h). |
| 2018–2019 | *Elementary Algebra and Analysis 1*, L1 MIASHS (lecture+exercises, 72 h). |
| | *Elementary Algebra and Analysis 2*, L1 Chemistry (exercises, 36 h). |
| 2017–2018 | *Calculus 1*, L1 MASS (exercises, 36 h). |
| | *Fundamental mathematics 1*, L1 SESI (oral exams & tutoring, 16 h + 10 h). |
| 2016–2017 | *Matrix calculus*, L2 econ-management (exercises, 36 h). |
| | *Calculus 1*, L1 econ-management (exercises, 15 h). |
| | *Calculus 1*, L1 MASS (exercises, 15 h). |
| 2015–2016 | *Fundamental mathematics 2*, L1 SESI (exercises, 66 h). |

## Visits

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| July 2019 | Université catholique de Louvain – Pascal Lambrechts (5 d.). |
| June 2019 | ETH Zurich – Thomas Willwacher (5 d.). |
| June 2018 | University of Regina – Don Stanley (10 d.). |
| Aug. 2017 | ETH Zurich – Thomas Willwacher (5 d.). |
| Jan. 2017 | Université catholique de Louvain – Pascal Lambrechts (5 d.). |
| June 2016 | ETH Zurich – Thomas Willwacher (4 d.). |

## Conferences attended

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|---|---|
| 2021 | *Colloque 2021 du GDR Topologie Algébrique et Applications*? (Université de Strasbourg) • *Mid-term workshop of the OCHoTop project* (Université de Lille) • ~~*Barcelona Conference on Higher Structures* (Centre de Recerca Matemàtica, Barcelona)~~ [Postponed due to COVID-19.]. |
| 2020 | ~~*Toric Topology and Polyhedral Products* (Fields Institute)~~ [cancelled due to Covid19] • *Málaga & Topology Meeting* (Universidad de Málaga). |
| 2019 | *Opening workshop of the OCHoTop project* (EPFL) • *Journée de topologie* (Université de Picardie Jules Verne) • *Colloque 2019 du GDR Topologie Algébrique et Applications* (Université d'Artois) • *Groupe de travail : Valeurs zêta multiples en quantification par déformation* (Université de Montpellier) • *SYM 10 Years Old* (Københavns Universitet) • *Topologie de basse dimension : Colloque en l'honneur de Christian Blanchet* (Université Paris Diderot) • *Higher Homotopy Algebras in Topology* (Max-Planck-Institut für Mathematik, Bonn) • *Structures Supérieures* (Centre International de Rencontres Mathématiques, Luminy) • *Higher Structures in Holomorphic and Topological Field Theory* (Institut des Hautes Études Scientifiques). |

2018    *New trends in K-theory and homotopy theory – A conference in honor of Max Karoubi's 80th birthday* (Institut Henri Poincaré, Paris) • *Colloque 2018 du GDR Topologie Algébrique* (Université de Montpellier) • *Derived Geometry and Higher Categorical Structures in Geometry and Physics* (Fields Institute) • *Graph Complexes, Configuration Spaces and Manifold Calculus* (University of British Columbia) • *Rational Homotopy and its Applications* (Université de Lille).

2017    *Colloque 2017 du GDR Topologie Algébrique* (Université Paris Diderot) • *Séminaire Itinérant de Catégories* (Université du Littoral Côte d'Opale) • *Journée des doctorants du Nord–Pas-de-Calais* (Université du Littoral Côte d'Opale) • *Workshop on Persistent Homology* (Université de Montpellier) • *Young Topologists Meeting 2017* (Stockholm Universitet & KTH) • *Algebraic Topology and Representation Theory* (Université de Lille) • *Derived Algebraic Geometry and Interactions* (Université de Toulouse) • *Fourth Young Mathematicians Colloquium* (Vrije Universiteit Brussel) • *Lens Topology and geometry 2017* (Université d'Artois, Lens) • *Workshop on Quantum Topology* (Université de Lille) • *Conference for Young researchers in homotopy theory and categorical structures* (Max-Planck-Institut für Mathematik, Bonn).

2016    *Conference in the honour of Saïd Zarati* (Institut des Hautes Études à Tunis) • *Colloque 2016 du GDR Topologie Algébrique et Applications* (Université de Picardie Jules Verne) • *Young Topologists Meeting 2016* (Københavns Universitet) • *Workshop: Factorization Algebras and Functorial Field Theories* (Mathematisches Forschungsinstitut Oberwolfach) • *Séminaire Itinérant de Catégories* (Université de Lille).

2015    *Colloque 2015 du GDR Topologie Algébrique et Applications* (Université de Toulouse-3) • *Lens Topology and geometry 2015* (Université d'Artois, Lens) • *Introductory School – Homotopy theory, manifolds, and field theories* (Hausdorff Research Institute for Mathematics) • *Séminaire du projet ANR HOGT* (Université de Strasbourg) • *Second Young Mathematicians Colloquium* (KU Leuven Kulak) • *Séminaire Itinérant de Catégories* (Université du Littoral Côte d'Opale, Calais) • *Masterclass : K-théorie topologique et applications* (Université de Strasbourg) • *Séminaire du projet ANR HOGT* (Université de Lille).

2014    *Colloque 2014 du GDR Topologie Algébrique et Applications* (Université Blaise Pascal) • *Colloque de clôture du projet ANR HOGT* (Université de Nice) • *Espaces des lacets en géométrie et topologie* (Université de Nantes) • *Young Topologists Meeting 2014* (Københavns Universitet) • *Young Mathematicians Colloquium* (Université de Lille) • *Séminaire du projet ANR HOGT* (Université de Lille).

2013    *Gelfand Centennial Conference: A View of 21st Century Mathematics* (Massachusetts Institute of Technology) • *Conference in Algebra and Topology celebrating Lionel Schwartz's 60th birthday* (Université de Nantes).