

ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

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**[Nome e cognome]
CURRICULUM VITAE****INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)**

COGNOME	LEWANSKI
NOME	DANILO
DATA DI NASCITA	[Giorno, mese, anno] 27/09/1989

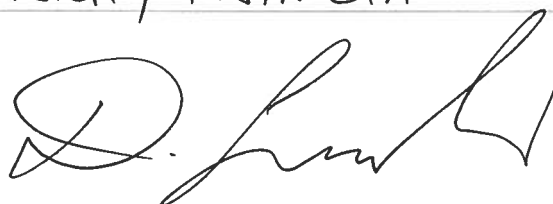
**INSERIRE IL PROPRIO CURRICULUM
(non eccedente le 30 pagine)**

Data

15/03/2021

Luogo

PARIGI, FRANCIA



Curriculum Vitae



PERSONAL INFORMATIONS:

🇮🇹 Italian citizen

🎂 27 September 1989

✉ danilo.lewanski@ipht.fr

🏠 Inst. Hautes Études Scientifiques (IHES) and Inst. Physique Théorique (IPhT), Paris, France

📧 danilo.lewanski

Education and professional experience

Researcher

*Jussieu-Paris Rive Gauche,
Sorbonne Université, Paris, FR*

Nov 21 - Oct 23

Funded by the ERC Consolidator Grant “ROGW” 864919 with PI Prof. Giorgeva.

Researcher

IHES and IPhT, Paris, FR

Nov 19 - Oct 21

Funded by the ERC Synergy Grant “ReNewQuantum” with PI Prof. Andersen, Prof. Eynard, Prof. Kontsevich, Prof. Mariño.

Researcher

Max-Planck-Institut, Bonn, DE

Nov 17 - Oct 19

PI: Gaëtan Borot and Don Zagier.

Ph.D. in Mathematics

Univ. Amsterdam, NL

Nov 13 - Oct 17

Thesis Title: “Enumerative geometry and moduli spaces of curves via topological recursion”

Topics: Algebraic Geometry and Mathematical Physics

Supervisor: Sergey Shadrin

M.Sc. in Mathematics

Università di Padova, IT

Sep 11 - Jul 13

Specialization in Algebra, Geometry and Number Theory (ALGANT courses)

Thesis title: “Moduli Spaces in Algebraic Geometry” on Mumford’s Geometric Invariant Theory

Thesis Supervisor: Francesco Bottacin

B.Sc. in Mathematics

Università di Bologna, IT

Sep 09 - July 11

Thesis title: “Knot Theory of robotic arms in 3D and 4D spaces” on Algebraic Topology

Thesis Supervisor: Massimo Ferri

Publications and preprints

On the Kontsevich Geometry of the combinatorial Teichmüller space

Article

ARXIV:2010.11806

2020

Joint work with J. Andersen, G. Borot, S. Charbonnier, A. Giacchetto, C. Wheeler

On the Goulden-Jackson-Vakil conjecture for double Hurwitz numbers ARXIV:2003.08043, SUBMITTED Joint work with N. Do.	<i>Article</i> 2020
Double Hurwitz numbers: polynomiality, topological recursion and intersection theory ARXIV:2002.00900, SUBMITTED Joint work with G. Borot, N. Do, M. Karev, E. Moskovsky.	<i>Article</i> 2020
Masur-Veech volumes and intersection theory: the principal strata of quadratic differentials ARXIV:1912.02267, SUBMITTED D. Chen, M. Möller, A. Sauvaget, with an appendix joint with G. Borot, A. Giacchetto	<i>Appendix</i> 2019
Topological recursion for Masur-Veech volumes ARXIV:1905.10352, SUBMITTED Joint work with J. Andersen, G. Borot, V. Delecroix, S. Charbonnier, A. Giacchetto, C. Wheeler	<i>Article</i> 2019
Wall-crossing and recursion formulae for tropical Jucys covers ARXIV: 1905.02247, TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY 373 (2020), 4685-4711 Joint work with M. Anas Hahn.	<i>Article</i> 2019
Half-spin tautological relations and Faber's proportionalities of kappa classes SYMMETRY, INTEGRABILITY AND GEOMETRY: METHODS AND APPLICATIONS (SIGMA), 15, [080] Joint work with E. Garcia Failde, R. Kramer, S. Shadrin	<i>Article</i> 2019
Tropical Jucys covers ARXIV: 1808.01383, SUBMITTED Joint work with M. Anas Hahn.	<i>Article</i> 2018
Harer-Zagier formula via Fock space COMMUNICATIONS IN NUMBER THEORY AND PHYSICS, 13 (2019), 3, 619-626	<i>Article</i> 2018
Wall-crossing formulae and strong piecewise polynomiality for mixed Grothendieck dessins d'enfants, monotone and simple double Hurwitz numbers ADVANCES IN MATHEMATICS 336 (2018), 38-69 Joint work with M. Anas Hahn, R. Kramer.	<i>Article</i> 2017
Special cases of the orbifold version of Zvonkine's r-ELSV formula MICHIGAN MATHEMATICAL JOURNAL, ADVANCE PUBLICATION (2020), 34 PAGES Joint work with G. Borot, R. Kramer, A. Popolitov, S. Shadrin.	<i>Article</i> 2017
Towards an orbifold generalization of Zvonkine's r-ELSV formula TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY, 372 (2019), 4447-4469 Joint work with R. Kramer, A. Popolitov, S. Shadrin.	<i>Article</i> 2017
On ELSV-type formulae, Hurwitz numbers and topological recursion AMS PROCEEDINGS OF SYMPOSIA IN PURE MATHEMATICS, VOLUME 100, 2018. HTTPS://DOI.ORG/10.1090/PSPUM/100/01764.	<i>Expository</i> 2017

The tautological ring of $\mathcal{M}_{g,n}$ via Pandharipande-Pixton-Zvonkine r -spin relations

ALGEBRAIC GEOMETRY 5.6 (2018), 703-727

Joint work with R.Kramer, F. Labib, S. Shadrin

Article

2017

Quasi-polynomiality of monotone orbifold Hurwitz numbers and Grothendieck's dessins d'enfant

DOCUMENTA MATHEMATICA 24, 857-898 (2019)

Joint work with R.Kramer, S. Shadrin

Article

2016

Ramifications of Hurwitz theory, KP integrability and quantum curves

JOURNAL OF HIGH ENERGY PHYSICS, 2016(5), DECEMBER 2015

Joint work with A. Alexandrov, S. Shadrin

Article

2016

\mathcal{W} -algebra constraints and topological recursion for A_N -singularity

INTERNATIONAL JOURNAL OF MATHEMATICS 27, 1650110(2016)

The main author is T. Milanov, appendix by D. Lewanski

Appendix

2016

Polynomiality of orbifold Hurwitz numbers, spectral curve, and a new proof of the Johnson-Pandharipande-Tseng formula

JOURNAL OF THE LONDON MATHEMATICAL SOCIETY 92(3), 547-565, APRIL 2015.

Joint work with P. Dunin-Barkowski, A. Popolitov, S. Shadrin

Article

2015

Chiodo formulas for the r -th roots and topological recursion

LETTERS IN MATHEMATICAL PHYSICS, 107(5), 901-919.

Joint work with A. Popolitov, S. Shadrin, D. Zvonkine

Article

2015

Selected Talks

Invited talk: TBA

CONFERENCE MOSCATR VII

Moscow, *RUS*

Jun, 2021

Invited talk: Cohomologie des espaces de modules des courbes de la physique mathématique.

MATHEMATICAL PHYSICS SEMINAR

IMB, Dijon, *FR*

Mar, 2021

Invited talk: ELSV-type formulae and new conjectures for BKP integrability II .

INTERNATIONAL TOPOLOGICAL RECURSION AND INTEGRABILITY SEMINAR

Higher School for Economics,
Moscow, *RUS*

Mar, 2021

Invited talk: ELSV-type formulae and new conjectures for BKP integrability I .

INTERNATIONAL TOPOLOGICAL RECURSION AND INTEGRABILITY SEMINAR

Higher School for Economics,
Moscow, *RUS*

Mar, 2021

Invited talk: Cohomologie des espaces de modules des courbes de la physique mathématique.

GENERAL MATHEMATICAL SEMINAR

IMB and LaBRI, Bordeaux, *FR*

Feb, 2021

Invited talk: Mathematical Physics for the Algebraic Geometry of moduli spaces of curves.

Copenhagen University, DK

Feb 2021

Invited talk: Interaction between string theory, integrable systems and moduli spaces of curves.

KU Leuven, BE

Feb 2021

GEOMETRY SEMINAR

Invited talk: Topological recursion, matrix models, and moduli spaces of curves.

SISSA Trieste, Italy

Jan, 2021

MATHEMATICAL PHYSICS SEMINAR

Invited talk: Resurgent Topological Recursion.

Les Diablerets, CH

Jan 2021

CONFERENCE WINTER SCHOOL IN MATHEMATICAL PHYSICS 2021

Invited talk: Topological Recursion for Hurwitz theory and intersection theory of moduli spaces of curves.

Bologna University, Italy

Jan 2021

Invited talk: Hurwitz theory, topological recursion, and ELSV formulae

Miami, USA

Feb, 2020

CONFERENCE TOPOLOGICAL AND GEOMETRIC RECURSION IN INTERACTION WITH RESURGENCE

Resurgence theory

Melbourne, AUS

Feb, 2020

UNIVERSITY OF MELBOURNE

Invited talk: on a conjecture of Goulden, Jackson, and Vakil

Paris, FR

Dec 5, 2019

JUSSIEU ENUMERATIVE GEOMETRY SEMINAR

Invited talk: Topological recursion and Masur-Veech volumes

Paris, FR

Dec 2, 2019

IHES ENUMERATIVE GEOMETRY SEMINAR

Invited talk: Topological recursion and Masur-Veech volumes

Montréal, CAN

Jul 2, 2019

INTERNATIONAL SYMPOSIUM QUANTUM THEORY AND SYMMETRIES AT CRM MONTRÉAL

Invited talk: Tropical Jucys covers

Genève, CH

Mar 18, 2019

UNIVERSITÉ DE GENÈVE

Invited Talk: Virasoro constraints for simple maps and free probability

Moscow, RU

June 7, 2018

CONFERENCE MOSCATR VI

Invited Talk: Tautological ring and Pandharipande-Pixton-Zvonkine tautological relations

Dijon, FR

Sep 7, 2017

UNIVERSITÉ DE BOURGOGNE

Invited Talk: Orbifold Hurwitz numbers, topological recursion and ELSV-type formulae

WINTER SCHOOL ON COMBINATORICS AND INTERACTIONS, CIRM

Marseille, FR

Jan 13, 2017

Invited Talk: Topological recursion and Hurwitz numbers

CONFERENCE TOPOLOGICAL RECURSION AND MODULARITY

Matrix center, Creswick, USA

Dec 22, 2016

Contributed Talk: From Topological Recursion to Johnson-Pandharipande-Tseng Formula (and back)

2016 AMS VON NEUMANN SYMPOSIUM: TOPOLOGICAL RECURSION AND ITS INFLUENCE IN ANALYSIS, GEOMETRY, AND TOPOLOGY

Charlotte, NC, USA

Jul 6, 2016

Contributed Talk: On Hurwitz enumerative problems

FIFTH WORKSHOP ON COMBINATORICS OF MODULI SPACES, HURWITZ NUMBERS, AND COHOMOLOGICAL FIELD THEORIES

Moscow, RUS

Jun 9, 2016

Invited Talk: Gromov-Witten Invariants

CONFERENCE PROSPECTIVES IN PHYSICAL MATHEMATICS

Bologna, IT

Dec 18, 2014

Scientific expeditions

Matrix Institute, Creswick, Australia

Event *Interactions between topological recursion, modularity, quantum invariants and low-dimensional topology*, November-December 2016

Institut Henri Poincaré, Paris

Thematic trimester *Combinatorics and interactions*, February-March 2017

Monash University, Melbourne

Bartnik Visiting Grant awardee ($\sim 10k$ AUD) with host Prof. N. Do, February 2019

Amsterdam University

Research visit with host Prof. S. Shadrin, July 2019

Monash University, Melbourne

Research visit with host Prof. N. Do, February 2020

Melbourne University

Research visit with host Prof. P. Norbury, March 2020

Service

Journal Referee

Referee for Manuscripta Mathematica, Communications in Mathematical Physics, Journal of High Energy Physics, Selecta Mathematica, SIGMA.

Conferences

ICM 2018: International Conference of Mathematicians

Rio, BR

Aug 1-9, 2018

MOSCATR VI: 6th Workshop on Combinatorics of Moduli Spaces, Cluster Algebras, and Topological Recursion

Moscow, RUS

June 4-9, 2018

Workshop on Moduli Spaces of Curves, Integrable Systems and related subjects

Dijon, FR

Sep 4-8, 2017

Trimester Combinatorics and Interactions, IHP

Paris, FR

Feb 27- Mar 31, 2017

Winter school on combinatorics and interactions, CIRM	<i>Marseille, FR</i> <i>Jan 9-13, 2017</i>
Interactions between Topological recursion, modularity, quantum invariants and low-dimensional topology, Matrix center	<i>Creswick, AUS</i> <i>Nov 28 - Dec 23, 2016</i>
2016 AMS von Neumann Symposium: Topological Recursion and its Influence in Analysis, Geometry, and Topology	<i>Charlotte, NC, USA</i> <i>Jul 4-8, 2016</i>
Fifth Workshop on Combinatorics of Moduli Spaces, Hurwitz numbers, and Cohomological Field Theories HSE, STEKLOV INSTITUTE, SKOLKOVO INSTITUTE OF SCIENCE AND TECHNOLOGY AND INDEPENDENT UNIVERSITY	<i>Moscow, Russia</i> <i>Jun 6-11, 2016</i>
2015 AMS Summer Research Institute in Algebraic Geometry UNIVERSITY OF UTAH	<i>Salt Lake City, UT, USA</i> <i>Jul 13-24, 2015</i>
Counting Instantons LORENTZ CENTER	<i>Leiden, The Netherlands</i> <i>Jun, 16-20, 2015</i>
Workshop on mathematical physics UNIVERSITEIT VAN AMSTERDAM In occasion of the PhD Defense of Petr Dunin-Barkowski	<i>Amsterdam, The Netherlands</i> <i>May 26-28, 2015</i>
Perspectives in Physical Mathematics UNIVERSITÀ DI BOLOGNA	<i>Bologna, Italy</i> <i>Dec 18-19, 2014</i>
Geometry and Quantum Theory Colloquium GQT CLUSTER	<i>The Netherlands</i> <i>Nov 6-7, 2014</i>
Geometry and Quantum Theory Colloquium GQT CLUSTER	<i>The Netherlands</i> <i>Jul 3-4, 2014</i>
Workshop on Instanton Counting: Moduli Spaces, Representation Theory and Integrable Systems LORENTZ CENTER	<i>Leiden, The Netherlands</i> <i>Jun 16, 2014</i>
Fourth Workshop on Combinatorics of Moduli Spaces, Cluster Algebras and Topological Recursion HSE, STEKLOV INSTITUTE, AND INDEPENDENT UNIVERSITY	<i>Moscow, Russia</i> <i>May 26-31, 2014</i>
Mirror Symmetry and Spin Curves PALAZZONE DI CORTONA	<i>Cortona, Italy</i> <i>Apr 28-30, 2014</i>

On Quantization of Moduli Spaces

Geneva, Switzerland

Apr 22-25, 2014

Moduli of curves and mathematical physics

UNIVERSITEIT VAN AMSTERDAM

In occasion of the PhD Defense of Loek Spitz

Amsterdam, The Netherlands

Jan 23, 2014

Geometry and Quantum Theory Colloquium

GQT CLUSTER

The Netherlands

Jan 17-18, 2014

Workshop on Algebraic Cycles and Tautological classes

In occasion of the PhD Defense of Qizheng Yin

Nijmegen, The Netherlands

Dec 18, 2013

VBAC2013: Hilbert Schemes, Sheaves and Representations

SISSA

Trieste, Italy

Jun 17-21, 2013

Recent trends in Algebraic Analysis

UNIVERSITÀ DI PADOVA

Trieste, Italy

Feb 19-23, 2013

Attended Schools

Advanced School on Moduli Spaces, Mirror Symmetry and Enumerative Geometry

ICTP

Trieste, Italy

Aug 1-12, 2016

Geometry and Quantum Theory Graduate School

GQT CLUSTER

The Netherlands

Nov 3-5, 2014

Modern trends in Gromov-Witten theory

UNIVERSITÄT OF HANNOVER

Hannover, Germany

Sep 8-12, 2014

Geometry and Quantum Theory Graduate School

GQT CLUSTER

The Netherlands

Jun 30-2, 2014

Geometry and Quantum Theory Graduate School

GQT CLUSTER

The Netherlands

Jan 14-16, 2014

The 9th William Rowan Hamilton Geometry and Topology Workshop on Geometry and Groups after Thurston

TRINITY COLLEGE DUBLIN

Dublin, Ireland

Aug 27-31, 2013

Applied and Computational Algebraic Topology (ACAT) School

UNIVERSITÀ DI BOLOGNA

Bologna, Italy

May 25-26, 2012

Cohomology Theories: a Road Map

Bressanone, Italy

Sep 12-17, 2011

Teaching

Wiskunde N2

ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

Assistant

Fall 16

Algebra I

GROUP THEORY

Assistant

Spring 15

Wiskunde N2

ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

Assistant

Fall 15

Algebra I

GROUP THEORY

Assistant

Spring 15

Wiskunde N2

ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS

Assistant

Fall 14

Galois Theorie

GALOIS THEORY

Assistant

Spring 14

Wiskunde N3

COMPLEX ANALYSIS

Assistant

Fall 13

Outreach activities

Development of a open-access maths educational online repository for local delivery in times of Covid-19 pandemic (<https://virtualmathscamp.com>)

LEADING THE VIDEO TEAM AS A DIRECTOR OF SAMI (SUPPORTING AFRICAN MATHEMATICS INITIATIVES)

Team leader

Summer-Fall 20

SAMI (Supporting African Mathematics Initiatives) Maths Camp Rwanda

ORGANISER OF A TWO WEEKS MATHS CAMP FOR HIGH SCHOOL STUDENTS

Main organizer

Summer 19

"Crosspollination" workshop on maths education in Africa in Cape Coast, Ghana

ESTABLISHING A COMMUNITY OF PRACTICE WITH INTERNATIONAL MATHS EDUCATORS AT DIFFERENT LEVELS

Speaker and participant

Spring 19

SAMI (Supporting African Mathematics Initiatives) Maths Camp Kenya

VOLUNTEERING IN A TWO WEEKS MATHS CAMP FOR HIGH SCHOOL STUDENTS

Co-organizer

Summer 18

SAMI (Supporting African Mathematics Initiatives) Maths Camp Ghana

VOLUNTEERING IN A TWO WEEKS MATHS CAMP FOR HIGH SCHOOL STUDENTS

Co-organizer

Summer 17

SAMI (Supporting African Mathematics Initiatives) Maths Camp Tanzania

VOLUNTEERING IN A TWO WEEKS MATHS CAMP FOR HIGH SCHOOL STUDENTS

Co-organizer

Summer 16

Skills

Programming Mathematica, Matlab, C/C++, LaTeX
Languages Italian (Mother tongue), English (C1), Spanish, French (B2), Dutch, German (B1)
Others Judo instructor for children and adults for two years, Scout chief, one year Civil Service