

Research Interests

My expertise lies at the interface between **Particle Physics**, **Gravity** and **Cosmology** where I develop and test novel paradigms to tackle some of the outstanding open questions in physics including the origin and evolution of our Universe, the nature of its dark components, the Cosmological Constant and Higgs Hierarchy Problems, the nature of gravity and its embedding in a consistent high energy completion.

Current Appointments

- Since 2023 **Deputy Head of Physics Department**, for People, EDI & Outreach, Imperial College London.
- Since 2018 **Imperial College London**, *Theoretical Physics group*, London, UK, **Professor**.
- Since 2018 **Perimeter Institute for Theoretical Physics**, ON, Canada, **Simons Emmy Noether Visiting Fellow**.

Past Academic Positions

- 2016 – 2018 **Imperial College London**, *Theoretical Physics group*, London, UK, **Reader**.
- 2011 – 2016 **Case Western Reserve University**, *Department of Physics*, Cleveland, OH, USA, **Assistant Professor**, (tenure-track) then **Associate Professor**, (tenured).
- 2010 – 2011 **Geneva University**, *Department of Theoretical Physics*, Geneva, Switzerland, **SNSF Assistant Professor**.
- 2006 – 2009 **McMaster University**, *Hamilton, Canada*.
& Perimeter Institute for Theoretical Physics, *Waterloo, Canada*.
Joint postdoctoral position in Cosmology.
- 2005 – 2006 **McGill University**, *Physics Department*, Montreal, Canada.
Postdoctoral position in Cosmology.

Education and Training

- 2002 – 2005 **PhD from DAMTP**, *Cambridge University, UK*.
PhD Advisor: Prof. Anne-Christine Davis.
- 1998 – 2000 **MSc**, *Ecole Polytechnique of Paris, France*.
- 1996 – 2001 **MSc**, *physics at EPFL, Ecole Polytechnique of Lausanne, Switzerland*.

Grants & Fundings

- 2023 – 2026 **Co-I on STFC Group Grant**, PI: Prof. Dan Waldram for the project “Imperial College Theoretical Physics Group, M-Theory, Cosmology and Quantum Field Theory.”
- 2020 – 2025 **2020 Simons Foundation Investigator**.
- 2020 – 2023 **Co-I on STFC Group Grant**, PI: Prof. Dan Waldram for the project “Imperial College Theoretical Physics Group, M-Theory, Cosmology and Quantum Field Theory.”
- 2017 – 2022 **PI on ERC Consolidator Grant**, for the project “Massive Gravity and Cosmology.”
- 2017 – 2021 **PI on Simons Foundation**, ‘Origins of the Universe’ program, Cosmology Beyond Einstein’s Theory group.
- 2017 – 2020 **Co-I on STFC Group Grant**, PI: Prof. Dan Waldram for the project “Imperial College Theoretical Physics Group, M-Theory, Cosmology and Quantum Field Theory.”
- 2016 – 2021 **PI on Royal Society Wolfson Merit Award**.
- 2016 **Co-I on DOE Department Grant**, PI: Prof. Glenn Starkman for the project “Theoretical Particle Physics at the Frontiers.”
- 2013 – 2016 **Co-I on DOE Department Grant**, PI: Prof. Glenn Starkman for the project “Theoretical Particle Physics at the Frontiers.”
- 2013 **PI on Emmy Noether Fellowship**, presented by the Perimeter Institute for Theoretical Physics.
- 2012 – 2013 **PI on ACES Advance Opportunity Grant**, for the project “Recent Developments in Massive Gravity.”
- 2010 – 2014 **PI on Swiss National Foundation Professorship Grant**, for the project “Challenging the cosmological paradigm.”
- 2007 & 2008 **Ontario MRI Canadian PDF fellowship**.

Honors and Awards

- 2023 Elected Member of the **American Academy of Arts & Sciences**.
- 2022 Laureate of **Beate Naroska Senior Guest Professorship Award** for outstanding research in Theoretical Physics and active involvement in creating equal opportunities for women in physics.
- 2021 Named as 2021 London Mathematical Society Mary Cartwright Lecturer.
- 2020 Nominated for the **Outstanding Teaching award** at Imperial College London, student choice award.
- 2017, 18, 19, and 2020 Nominated for the **Outstanding Personal Tutoring award** at Imperial College London, student choice award.
- 2020 Named as a **Simons Foundation Investigator**.
- 2020 **Blavatnik Laureate**, (winner) in Physical Sciences and Engineering for the **Blavatnik Awards for Young Scientists in the UK**.
- 2018 **Adams Prize**, prize for contributions to Mathematics awarded by the University of Cambridge.
- 2018 **Blavatnik Finalist**, in Physical Sciences and Engineering for the inaugural Blavatnik Awards in the UK.
- 2017 **EPFL Alumni Award**.
- 2016 – 2021 **Royal Society Wolfson Merit Award**.
- 2004 **Fellow of the Cambridge Overseas Society**

- 2002 – 2004 **Irene Hallinan Scholarship**, awarded from Girton College, Cambridge.
- 2000 **"Medaille de la Defence National,"** awarded from the French Polytechnique School.
- 1998 **Adrien Tschumy Prize** for the top Student across all fields at the EPFL.

Scientific Leadership/Comission of Trust

- **2023, Excellence Advisory Board Member** of Universität Hamburg, in charge of leading the implementation of strategic projects and structures that support German Excellence Strategy program, institutional development and commitment to top-level research.
- **Since 2023, Editor** at **JCAP**, Journal of Cosmology and Astroparticle Physics, IoP.
- **Since 2023, Chair** of **UKRI Particle Physics Grants Panels** in charge of assessing and making recommendations to the STFC Executive on research grant applications in particle physics.
- **Since 2023, Core Member of the Royal Society's Research Appointment Panel** Aiii. In charge of assessing applications for University Research Fellowships.
- **Since 2022, International Chair** of Swiss National Foundation Starting Grant STEM-B program.
- **Since 2021, Editor** at **Physics Reports**.
- 2021, **Chair** of the Physics and Cosmology Panel, NASA Hubble Fellowship Program.
- 2021, **External Expert**, committee in charge of selection of the Associate Professorship of Mathematical Physics Oxford, UK.
- 2021, **External Expert**, committee in charge of selection of the theoretical cosmology professor position at Paris Saclay, France.
- 2020, **Advisory Board Member** in charge of review and evaluation of the Faculty of Physics at the University of Vienna, Austria.
- 2020 – 2022, **Judge** for **Buchalter Cosmology Prize**.
- Since 2020, **Invited Member** of **FQXi**, the Foundational Questions Institute.
- **Selected Member** of **Voyage 2050 Topical Team**, Long-term planning of the ESA Science Programme.
- Member of the **LISA Cosmology** and **LISA Fundamental Physics** Working Groups.
- **Grant Review Panel** Member of:
 - STFC IPPP (Institute for Particle Physics Phenomenology) Core program panel member.
 - STFC PGP theory panel, main UK funding body, panel in charge of fundings in particle physics theory across the UK.
 - SNSF Eccellenza STEM panel, Swiss funding body.
 - NSF GRFP, US funding body.
 - ERC MSCA-IF, European funding body.
- **Reviewer** on numerous international grant (Belgium, CNRS, Chili, DOE, ERC, Israel, Japan, NASA, NSF, Royal Society, Simons, Sweden, STFC, Switzerland).
- **Board Member** for CQG and Universe MDPI.
- **Reviewer** for a multitude of international grant (Belgium, Chili, ERC, France, Israel, Japan, NASA, Simons, Sweden, Switzerland, UK, USA).
- **Reviewer** for a multitude of research journals (CQG, EPJ, JCAP, JGRG, JPHYSA, JHEP, PLB, PRD, PRL, Mod.PL, MathReview, NJP, ...).
- **Invited author** for volume on "**Encyclopedia of Cosmology**," by World Scientific Publishers. To be released Nov 2023.
- **Book Deal** with **Princeton University Press**, (English Rights), to be released April 2nd, 2024.

French, German, Japanese & Romanian rights signed with other publishers.

- **Departmental Roles**

Since 2023 **Deputy Head of Department**, Imperial College London, in charge of People, EDI & Outreach.

2022 – 2023 **Head of Physics Outreach**, Imperial College London.

2019 – 2023 Member of Physics **Research Committee**, Imperial College London.

2014 – 2016 **Chair** of Graduate Recruiting Committee, CWRU.

2014 – 2016 Member of Undergraduate Recruiting Committee, CWRU.

2011 – 2016 Qualifier Exam Committee, CWRU.

- **Conference Organizer and SOC member**

2024 **SOC** member of [Gravity and Cosmology 2024](#), YITP long-term workshop, Japan.

2023 **SOC** member of [Timescales in Astrophysics](#) conference, NYU Abu Dhabi.

2023 **SOC** member of [Quantum Gravity Conference](#), Nijmegen, Netherland.

2021 **SOC** member of [Texas Symposium on Relativistic Astrophysics](#), Prague, Czech Republic.

2021 **Moderator**, discussion session, online workshop on "[Current challenges in gravitational physics](#)."

2021 **SOC** member of [Gravity and Cosmology 2021/2022](#), YITP long-term workshop, Japan.

2020 Co-Organizer of workshop on "[Gravitational scattering, inspiral, and radiation](#)", Galileo Galilei Institute for Theoretical Physics, Florence, [postponed to 2021 - remote].

2019 Convener for Modified Gravity/Dark Energy section at COSMO2019, Aachen.

2018 Convener for Gravity section at PASCOS2018, CWRU.

2016 Co-Organizer of workshop on "Theoretical Cosmology in the Era of Large Surveys", Galileo Galilei Institute for Theoretical Physics, Florence.

2014 Organizer of workshop on large scale tests of modified gravity, Lorentz Center, Leiden.

2014 Organizer of workshop on Frontiers of Fundamental Physics, FFP14, Marseilles.

2011 Co-Organizer of workshop on Modified Gravity, CWRU.

2009 Organizer of Conference on the Cosmological Constant Problem, Perimeter Institute.

Teaching, Tutoring & Advising Experience

Lecturing Experience

- 2018–23 **Advanced Classical Physics**, *Imperial College*, Lecturer.
Undergraduate and Master course, $\mathcal{O}(280)$ students.
- 2018 **Advanced Quantum Field Theory**, *Imperial College*, Lecturer for QFFF Master course (Quantum Fields and Fundamental Forces), $\mathcal{O}(40)$ students..
- 2017 **Math Analysis**, *Imperial College*, Tutorials.
- 2017 **Vector Calculus**, *Imperial College*, Tutorials.
- 2016 **Mechanics**, *Imperial College*, Tutorials.
- 2016 **Field Theory in Curved Spacetime**, *CWRU*, graduate reading course.
- 2014 **Effective Field Theory**, *CWRU*, graduate course.
- 2013 **Modified Gravity**, *CWRU*, graduate course.
- 2012 **General Relativity**, *CWRU*, graduate and undergraduate course.
- 2012–2015 **Mathematical Methods for Physicists**, *CWRU*, graduate and undergraduate.
- 2011 **Cosmology**, *Geneva University*, third year and master course.
- 2010 **Quantum Field Theory**, *Geneva University*, third year and master course.
- 2010 **General Relativity**, *Geneva University*, third year and master course.
- 2008 **General Relativity**, *Waterloo University*, fourth year and master course.

Invited Summer School Lecturer

- June 2023 Series of lectures on [Effective Field Theory approaches for Gravity and Cosmology](#), Desy, Germany.
- Sept. 2022 Series of lectures on EFT of gravity at [Gravity@Prague2022](#) summer school.
- Jan. 2020 Mathematical Aspects of General Relativity ([Aotearoa GR2020](#)), New Zealand.
Other lecturers: Chruściel, Cvetic, Taubes and Witten.
- Sept. 2019 Heraeus Summer School ("Saalburg Summer School") for Graduate Students on "[Foundations and New Methods in Theoretical Physics](#)", Germany.
Other lecturers: Bjerrum-Bohr, Godazgar, Giulini and Perry.
- June 2019 [ISAPP summer school on "The dark side of the Universe,"](#) Heidelberg, Germany
- June 2018 [ICTP Summer School on Cosmology](#), Trieste, Italy.
Other lecturers: Komatsu, D'Eramo, Babak, Cardoso, Kleban, Sheth and Senatore.
- June 2018 Tohoku Summer School on Cosmology, Japan
- Sept. 2013 7th Aegean Summer School on "*Beyond Einstein's Theory of Gravity*," Paros, Greece
- July 2012 Yukawa Summer School on "*Massive Gravity*," Kyoto, Japan
- Aug. 2008 Nordita Summer School on "*de Sitter Cosmology*," Stockholm, Sweden

Postdoctoral Fellows Advisor

- From 2023 **Dr. Sadra Jazayeri**.
- Since 2022 **Dr. Greg Kaplanek**.
- Since 2022 **Dr. Anna Tokareva**.
- Since 2020 **Dr. Mariana Carrillo Gonzalez**.
- 2020–2022 **Dr. Mauro Pieroni**, *now cern fellow*.
- Since 2018 **Dr. Lasma Alberte**, *now working for Data Company*.

- 2020–2021 **Dr. Aaron Held**, *Royal Society Newton Fellow*, now Postdoc in Princeton.
- 2020–2021 **Dr. Andrei Khmelnitsky**, *now Working for Big Data*.
- 2019–2021 **Dr. Sebastian Garcia-Saenz**, *now faculty position at SUSTech, China*.
- 2019–2020 **Dr. Victor Lekeu**, *(now postdoc at Potsdam, Max Planck Inst.)*.
- 2018–2021 **Dr. Jun Zhang**, *now assistant professor at the International Center for Theoretical Physics Asia-Pacific*.
- 2017–2018 **Dr. David Pirtskhalava**, *now research professor at NYU, USA*.
- 2017–2017 **Dr. Shuang–Yong Zhou**, *now faculty at USTC, China*.
- 2013–2016 **Dr. Stefano Anselmo**, *now postdoc at IAP, Paris, France*.
- 2012–2014 **Dr. Raquel Ribeiro**, *now Associate Professor at Minerva*.
- 2010–2011 **Dr. Clare Burrage**, *now faculty at Nottingham University, UK*.

PhD Students Advisor

- Since 2020 **Aoibheann Margalit**, *Recipient of Imperial President Scholarship*, .
- Since 2019 **Sumer Jaitly**, *Recipient of the QFFF Abdus Salam Prize*.
- 2019–2023 **Victor Pozsgay**, *Recipient of Imperial President Scholarship*.
- 2016–2019 **Scott Melville**, *offered lectureship at QMUL, UK*.
 Recipient of Imperial President Scholarship and winner of the Best Student Talk Prize at BritGrav. Winner of the IoP Gravitational Physics Group PhD Thesis Prize.
- 2012–2016 **Andrew Matas**, *Recipient of NSF Graduate Student Fellowship*..
- 2010–2014 **Lavinia Heisenberg**, *(now professor at University of Heidelberg)*.
 Recipient of the J. Wurth prize for the best PhD work and of the Springer Thesis Award.

Thesis Committees (PhD/Master Examiner Expert)

- Sep 2023 **Thomas Colas**. PhD in Theoretical Cosmology, Paris-Saclay, France.
- Oct 2022 **Manuel Accettulli Huber**. PhD in Theoretical Physics, QMUL, UK.
- June 2022 **Jeremie Frankfort**. PhD in Cosmology, Geneva University, Switzerland.
- May 2022 **Lotte ter Haar**. PhD in Numerical Gravity, SISSA, Italy.
- Nov 2020 **Sanjay Bloor**. PhD on Dark Matter, Imperial College London, UK.
- Sept 2020 **Leong Khim Wong**. PhD in Cosmology, University of Cambridge, UK.
- July 2020 **Kelian Häring**. Master in Theoretical Physics, EPFL, Switzerland.
- Sept 2018 **Charles Mazuet**. PhD in Theoretical Physics, Université de Tours, France.
- June 2017 **James J. Bonifacio**. PhD in Theoretical Physics, Oxford University, UK.
- June 2017 **Erwan Allys**. PhD in Cosmology, Université Pierre et Marie Curie, France.
- Sept. 2016 **Pietro Guarato**. PhD in Cosmology, Geneva University, Switzerland.
- Aug. 2016 **Johanna Nagy**. PhD in Astrophysics, CWRU, USA.
- June 2015 **Luke Keltner**. PhD in Theoretical Physics, CWRU, USA.
- Feb. 2014 **Maud Jaccard**. PhD in Theoretical Physics, Geneva University, Switzerland.
- Jan. 2014 **Martina Falco**. PhD in Astrophysics, Copenhagen, Denmark.
- Nov. 2013 **Marit Sandstad**. PhD in Cosmology, University of Oslo, Norway.
- Sept. 2013 **George Zahariade**. PhD in Theoretical Physics, Université Paris Diderot, France.
- Feb. 2011 **Umberto Cannella**. PhD in Gravitation, Geneva University, Switzerland.

Dissemination Activities

Research Talks and Seminars in last year

[All talks in person unless specified.]

- May 2023 Invited Speaker at [UK Cosmo Workshop](#), Cambridge, UK.
- March 2023 International Women's Day talk for [WSET](#) (Women in STEM), Imperial College, UK.
- Feb 2023 Invited [Theory Colloquium](#) Speaker, DESY, Germany.
- Feb 2023 Invited Speaker [Beate Naroska Guest Professorship Award Ceremony 2023](#), DESY, Germany.
- Jan 2023 Invited Speaker at Workshop on [Exotic Approaches to Naturalness](#), CERN, Switzerland.
- Jan 2023 Invited plenary Speaker at [Testing Gravity 2023](#), SFU, Vancouver, Canada.
- Dec 2022 Plenary speaker at [MIAMI 2022 Physics Conference](#).
- Dec 2022 Invited Speaker [London Cosmology Meeting](#), Royal Astrophysical Society, London.
- Oct 2022 Invited Contribution [Higgs@10 celebration](#), Imperial College London.
- Oct 2022 Invited Colloquium [International Institute of Physics](#), Natal, Brazil (remote).
- Aug 2022 Invited plenary speaker at [Bohr-100: Current Themes in Theoretical Physics](#).
- July 2022 Invited speaker at [Seattle Snowmass Summer Meeting 2022](#), Theory Frontier planning exercise.
- June 2022 Invited plenary speaker at [SUSY2022](#), 29th International Conference on Supersymmetry and Unification of Fundamental Interactions, University of Ioannina, Greece.
- May 2022 Invited Speaker, IAS meeting on "[Possible and Impossible in Effective Field Theory: From the S-Matrix to the Swampland](#)," Princeton.
- April 2022 Invited Speaker, KITP conference on "Storming the Gravitational Wave Frontier"
- March 2022 Invited Seminar Speaker, "From UV to IR and Back," Perimeter Institute for Theoretical Physics, (remote).
- March 2022 Invited Colloquium Speaker, "Physics under the gravitational Rainbow", Columbia University, (remote).
- March 2022 Invited Plenary Speaker, "Positivity with Gravity", Dutch Black Hole Consortium, Amsterdam.
- March 2022 Invited Seminar Speaker, "From UV to IR and Back", Annecy, (remote).
- March 2022 Invited Colloquium Speaker, "Physics under the gravitational Rainbow", Oxford University.
- Feb 2022 Invited Plenary Speaker, "Positivity & Causality with Gravity", Gravity - The next generation Symposium, Yukawa Institute, (remote).
- Feb 2022 Invited Colloquium Speaker, "Physics under the gravitational Rainbow", Warwick University, (remote).

In addition to $\mathcal{O}(200)$ other invited research talks since 2005 available at following [link](#).

Outreach, Public Talks & Media Cover

I have contributed to the dissemination of Science through summer school, public talks, interviews and other outreach activities in Europe, North America, South America, Asia (Japan, India and Vietnam), New Zealand and Africa (Rwanda and South Africa). In addition my research has been featured internationally with dedicated articles and interviews including in [Brazil](#), [Finland](#), [France](#), [Italy](#), [Lithuania](#), [New Zealand](#), [Norway](#), [Portugal](#), [Romania](#), [Sweden](#), [UK](#) and in the [USA](#).

Other specific contributions include:

- 2023 Invited Speaker for [World Science Festival](#), New York, USA.
- 2023 Invited Speaker for [U3A](#), (University of Third Age).
- 2022 Interview with Vox Media, explaining the unexplainable.
- 2022 [Lecture for New Scientists](#), Big Thinkers Series
- 2022 Interview with NewsTalk, Irish Radio science program
- 2022 Contributions to LiveScience for article on Life's Little Mysteries "Will anything ever be able to travel faster than the speed of light?"
- 2022 Invited as UK Physical Society Speaker.
- 2021 **Book Deal** with [Princeton University Press](#) (release date April 2nd 2024), English rights. French, German, Japanese and Romanian rights also agreed.
- 2022 Interviewed for [How the Universe Works season 10](#) (Discovery Channel).
- 2021 Invited as a thought leader to [Braemar Science Summit: The New Enlightenment](#).
- 2021 Invited by president of Imperial College as speaker for [Current and future women luminaries](#), on the topic of "How do we communicate with the Universe".
- 2021 Invited as a physics [research showcase](#) speaker, Imperial Faculty of Natural Sciences.
- 2021 Physics podcast [Beyond the Fourth Floor](#).
- 2020 Feature article in [Science & Vie](#) (Europe's number one scientific news magazine).
- 2020 Scientific expert for **Los Angeles Times** on movie Tenet [How real is the science in Christopher Nolan's 'Tenet'? We asked an expert](#) by Emily Zemler.
- 2020 Invited [Speaker and Panelist](#) to the **Art and Idea festival** "HowTheLightGetsIn 2020," London, Delhi, New York.
- 2020 [Quanta Magazine Q&A](#): "The Physicist Who Slayed Gravity's Ghosts".
- 2020 [New Scientist Cover Story](#): "What does gravity weigh?" invited article.
- 2020 Invited contribution for [Quanta Magazine](#), "Why Gravity Is Not Like the Other Forces," edited by Natalie Wolchover.
- 2020 Featured interview in [PhysicsWorld](#) podcast on careers in physics by Andrew Glester.
- 2020 Invited Speaker and Panelist for Symposium "Game Changers: 9 Young Scientists Transforming Our World" hosted by the New York Academy of Sciences.
- 2020 Saturday Feature article in [The Guardian](#), by Hannah Devlin.
- 2020 Featured interview in [New Zealand Main Radio](#).
- 2020 [New Scientist interview](#) for article on "What is Reality?"
- 2019 **Invited author** for volume on "[Encyclopedia of Cosmology](#)," to be published with World Scientific Publishers.
- 2019 Invited Panelist for [Women's day and 50 years of the EPFL](#), Switzerland.
- 2018 **CERN EP letter** Newsletter of the EP department [Interview with Claudia de Rham](#).
- 2018 **Radio Lac**, "[Claudia de Rham, physicienne](#)," radio interview.

- 2018 **Swiss National Radio**, "La gravitation au coeur du 18e colloque Wright à Genève."
- 2018 **BBC the Naked Scientist**, interview on "Hawking's recent work: The Information Paradox"
- 2018 **Article Inside the Perimeter** People of PI: Claudia de Rham, unstuck by gravity.
- 2018 YouTube video interview on "Cosmology's Latest Puzzle: The Hubble Tension"
- 2018 Interview for the James Whale show on **talkRADIO** on "zero-point energy"
- 2018 Panel discussion with high-school students, CERN, Geneva, Switzerland
- 2018 Invited public talk on gravitation, dark energy and cosmology for the "**2018 Wright Science Colloquium Series**," Geneva, Switzerland
- 2018 Invited plenary talk for the **Cambridge Science Week**, outreach meeting at the Cambridge Philosophical Society, UK on "What we don't know about the universe"
- 2018 Invited public talk for **Friends of Imperial** on "Understanding Gravity at All Scales"
- 2017 **Featured article** in the Alumnist, the magazine for EPFL graduates "[Claudia de Rham, exploratrice de l'Univers](#)"
- 2017 **New Scientist**, interview for article on "[Dark energy is mutating, with grave consequences for the cosmos](#)"
- 2017 **Swiss National Radio**, one-hour long interview, "[Rencontre avec Claudia de Rham, une spécialiste du cosmos](#)"
- 2017 **Through the Wormhole with Morgan Freeman**, Season 8, episode 1, "[Is the Force with Us?](#)", featured interview
- 2017 Interview on **Gender and Physics** for **Ideas Roadshow**
- 2017 Interview for **Nature magazine** for article on implications of the recent neutron star merger discovery
- 2017 Invited article on the notion of time for Ringel Editorial Services.
- 2016 "*Gravitational Waves*," public talk, Euclid Tavern, Cleveland, USA
- 2016 **Swiss National Television**, "[L'astrophysicienne lausannoise Claudia de Rham effectue des recherches sur l'univers et la gravitation à Londres](#)" report by Laurent Burkhalter
- 2016 **L'Hebdo**, (Swiss Magazine), "[La scientifique suisse qui relativise Einstein](#)" adaptation by Gian Pozzy
- 2016 **Die Zeit**, (German Newspaper), "[Sie denkt weiter als Einstein](#)" by Hanna Wick
- 2016 **Physics World**, "[Might gravity have mass?](#)," by Matthew Francis
- 2015 Invited public **talk** for the "**100 year of General Relativity**" week-long Wright Colloquium series, Geneva, Switzerland
- 2015 Co-organizer and speaker at **TEDxCLE** event for the "**100 year of General Relativity**," Cleveland, OH
- 2014 **Le Monde**, "[La relativité générale à l'épreuve des tests](#)," by Philippe Pajot.
- 2013 **Nature**, "[Fat gravity particle gives clues to dark energy](#)," by Zeeya Merali.

In addition to $\mathcal{O}(50)$ other invited public outreach talks and other press coverage articles.

Publications

Author ID: ResearcherID: P-9318-2015
ORCID ID: 0000-0002-6183-1030
Link to ORCID public record: orcid.org/0000-0002-6183-1030
InSpire author ID: [C.de.Rham.1](#)
Link to InSpire personal page: inspirehep.net/authors/1030566

According to some measures (excluding self-citations), C. de Rham has been recently **ranked as the top author** across all fields in inspires since 2010 (table 10 of [1803.10713](#)).

Recent Submission

101. **"Positivity-causality competition: a road to ultimate EFT consistency constraints"**
M. Carrillo González, **C. de Rham**, S. Jaitly, V. Pozsgay, A. Tokareva, arXiv:2307.04784, [hep-th].
100. **"A dynamical formulation of ghost-free massive gravity"**
C. de Rham, J. Kożuszek, A. J. Tolley, T. Wiseman arXiv:2302.04876, [hep-th].

Research Papers Published in Peer-Reviewed Journals

99. **"To Half-Be or Not To Be?"**
C. de Rham, S. Garcia-Saenz, L. Heisenberg, V. Pozsgay, JHEP 06 (2023) 088.
98. **"Constraints on Regge behaviour from IR physics"**
C. de Rham, S. Jaitly, A.J. Tolley, Phys.Rev.D 108 (2023) 4, 046011.
97. **"Testing gravitational wave propagation with multiband detections"**
T. Baker, E. Barausse, A. Chen, **C. de Rham**, M. Pieroni, G. Tasinato, JCAP 03 (2023) 044.
96. **"Positivity bounds in vector theories"**
C. de Rham, L. Engelbrecht, L. Heisenberg, A. Lüscher, JHEP 12 (2022) 086.
95. **"Causal effective field theories"**
M. Carrillo Gonzalez, **C. de Rham**, V. Pozsgay, A. J. Tolley, Phys.Rev.D 106 (2022) 10, 105018.
94. **"New Horizons for Fundamental Physics with LISA"**
K. G. Arun et.al. (incl. C de Rham), Living Rev.Rel. 25 (2022) 1, 4.
93. **"Causality Constraints on Gravitational Effective Field Theories"**
C. de Rham, A. J. Tolley, J. Zhang, Phys.Rev.Lett. 128 (2022) 13, 131102.
92. **"A cautionary case of casual causality"**
C. Y.-R. Chen, **C. de Rham**, A. Margalit, A. J. Tolley, JHEP 03 (2022) 025.
91. **"Reverse Bootstrapping: IR lessons for UV physics"**
L. Alberte, **C. de Rham**, S. Jaitly and A. J. Tolley, Phys.Rev.Lett. 128 (2022) 5, 5.
90. **"Cosmology of Extended Proca-Nuevo"**
C. de Rham, S. Garcia-Saenz, L. Heisenberg, and V. Pozsgay, JCAP 03 (2022) 053.
89. **"Quantum stability of Proca-Nuevo"**
C. de Rham, L. Heisenberg, A. Kumar and J. Zosso, Phys.Rev.D 105 (2022) 2.
88. **"Scattering Amplitudes for Binary Systems beyond GR"**
M. Carrillo-González, **C. de Rham**, and A. J. Tolley, JHEP, 2021, 87 (2021).

87. [“Positivity Bounds on Dark Energy: When Matter Matters”](#)
C. de Rham, S. Melville and J. Noller, JCAP 08 (2021) 018.
86. [“A Square Peg in a Circular Hole: Choosing the Right Ansatz for Isolated Black Holes in Generic Gravitational Theories”](#)
Y. Xie, J. Zhang, H. O. Silva, **C. de Rham**, H. Witek and N. Yunes, Phys.Rev.Lett24 (2021), 126
85. [“QED positivity bounds”](#)
L. Alberte, **C. de Rham**, S. Jaitly and A. J. Tolley, Phys.Rev.D 103 (2021) 12, 125020.
84. [“Positivity Bounds and the Massless Spin-2 Pole”](#)
L. Alberte, **C. de Rham**, S. Jaitly and A. J. Tolley, Phys.Rev. D102 (2020), 125023
83. [“Causality in Curved Spacetimes: The Speed of Light & Gravity”](#)
C. de Rham and A. J. Tolley, Phys.Rev. D102 (2020) no.8, 084048.
82. [“New class of Proca interactions,”](#)
C. de Rham and V. Pozsgay, Phys.Rev. D102 (2020) no.8, 083508.
81. [“Black Hole Gravitational Waves in the Effective Field Theory of Gravity”](#)
C. de Rham, J. Francfort, J. Zhang, Phys.Rev. D102 (2020) no.2, 024079.
80. [“Positivity Constraints on Interacting Pseudo-Linear Spin-2 Fields”](#)
L. Alberte, **C. de Rham**, A. Momeni, J. Rumbutis and A. J. Tolley, JHEP 2007 (2020) 121.
79. [“Positivity Constraints on Interacting Spin-2 Fields”](#)
L. Alberte, **C. de Rham**, A. Momeni, J. Rumbutis and A. J. Tolley, JHEP 03 (2020) 097.
78. [“The Speed of Gravity”](#)
C. de Rham and A. J. Tolley, Phys.Rev.D 101 (2020) 6.
77. [“EFT of Interacting Spin-2 Fields”](#)
L. Alberte, **C. de Rham**, A. Momeni, J. Rumbutis and A. J. Tolley, JHEP 2001 (2020) 131.
76. [“Perturbations of Stealth Black Holes in DHOST Theories”](#)
C. de Rham and J. Zhang, Phys.Rev. D100 (2019) no.12, 124023.
75. [“Generalized Proca and its Constraint Algebra”](#)
J. Beltrán Jiménez, **C. de Rham** and L. Heisenberg, Phys.Lett.B802, 135244 (2020).
74. [“Spin-2 and the Weak Gravity Conjecture”](#)
C. de Rham, L. Heisenberg, A. J. Tolley, Phys.Rev. D100 (2019) no.10, 104033.
73. [“The gravitational rainbow beyond Einstein gravity”](#)
C. de Rham, International Journal of Modern Physics D, Vol. 28 (2019) 1942003.
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