

Imperial College London
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Professor

Research Interests

My expertise lies at the interface between **Gravity**, **Cosmology** and **Particle Physics** where I develop and test new models and paradigms.

- **UV Completeness:** Understanding the low-energy restrictions to the existence of a standard high energy completion and consequences to Cosmology and Particle Physics.
- **Early Universe Cosmology:** Probing signatures of the Early Universe be it for inflation or its alternatives.
- **Dark Energy:** What is the source of the late-time acceleration of the Universe ?
- **Cosmological Constant Problem:** Understanding the effect from vacuum energy of particle physics on cosmological scales.
- **Behaviour of Gravity:** Deriving alternatives to General Relativity with an emphasize on theoretical consistency and quantum stability.
- **Tests of Gravity:** Gravitational Waves, Lab, Solar System, Astrophysical and Cosmological signatures and tests of Gravity and screening mechanisms.

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

Current Appointments

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**.

Since 2017 **Case Western Reserve University**, OH, USA, **Adjunct Professor of Physics**.

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, **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: Profs. Anne-Christine Davis

- 2000 – 2001 **MSc**, *in physics EPFL, Swiss Institute of Technology, Lausanne, Switzerland.*
1998 – 2000 **MSc**, *Ecole Polytechnique of Paris, France.*

Grants & Fundings

- 2020 – 2025 Named as **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. Group Director: **Prof. Gregory Gabadadze**.
- 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."
- 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

- 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**, "In recognition of the professor whose brilliant research has made her a world reference in the field of cosmology."
- 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

- **Chair** of the Physics and Cosmology Panel for the 2021 NASA Hubble Fellowship Program.
- Since 2020, **Judge** for the **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**.
- **Invited author** for volume on "**Encyclopedia of Cosmology**," to be published by World Scientific Publishers.
- **STFC Panel Member**, PPGP theory panel, grant reviews.
- **SNSF Panel Member**, Swiss National Science Foundation, Eccellenza grant reviews.
- **ERC Panel Member**, grant reviews.
- **Panel Member** in charge of evaluation of the Faculty of Physics at the University of Vienna.
- **Reviewer** for the NSF Graduate Research Fellowship Program.
- **Board Member** for CQG and Universe MDPI.
- **Referee** for Mod.Phys. Lett., PRL, PLB, JCAP, JHEP, PRD, NJP, CQG, JPHYSA, Mathematical Review, Universe MDPI and Journal of General Relativity and Gravitation.
- **Conference Organizer**
 - 2020 Co-Organizer of workshop on "**Gravitational scattering, inspiral, and radiation**", Galileo Galilei Institute for Theoretical Physics, Florence. [postponed to 2021]
 - 2019 Convener for Modified Gravity/Dark Energy section at COSMO2019, Aachen.
 - 2018 Convener for Gravity section at PASCOS2018, CWRU.
 - 2016 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.

Postdoctoral Fellows Advisor

- Since 2020 **Dr. Andrei Khmelnitsky**.
- Since 2020 **Dr. Aaron Held**, *Royal Society Newton Fellow*.
- Since 2019 **Dr. Victor Lekeu**.
- Since 2019 **Dr. Sebastian Garcia-Saenz**.
- Since 2018 **Dr. Jun Zhang**.
- Since 2018 **Dr. Lasma Alberte**.
- 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**, (*then postdoc at Queen Mary London, UK*).

2010–2011 **Dr. Clare Burrage**, (*now faculty at Nottingham University, UK*).

Non-official mentoring Matteo Fasiello (2011–2014), Jose Beltràn (2011), Lukas Hollenstein (2010–2011) and Rajeev Kumar Jain (2010–2011).

PhD Students Advisor

Since 2019 **Victor Pozsgay**, *Recipient of Imperial President Scholarship*.

Since 2019 **Sumer Jaitly**, *Recipient of the QFFF Abdus Salam Prize*.

2016–2019 **Scott Melville**, (*now postdoc at Cambridge University, 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**, (*now postdoc at AEI Max Planck Institute for Gravitational Physics, Postdam, Germany*). *Recipient of NSF Graduate Student Fellowship..*

2010–2014 **Lavinia Heisenberg**, (*now assistant professor at ETHZ, Switzerland*).

Recipient of the J. Wurth prize for the best PhD work and of the Springer Thesis Award.

Service on External Thesis Committees (PhD Examiner Expert)

Sept 2018 **Charles Mazuet's** PhD defence on "*Cosmologies with massive gravitons and their properties*"

June 2017 **James J. Bonifacio's** PhD defence on "*Aspects of Massive Spin-2 Effective Field Theories*"

June 2017 **Erwan Allys's** PhD defence on "*Au-delà des modèles standards en cosmologie*" (Beyond the Standard Models in Cosmology)

Sept. 2016 **Pietro Guarato's** PhD defence on "*Cosmological perturbations in massive gravity and bi-gravity*"

Aug. 2016 **Johanna Nagy's** PhD defence on "*Optical Development For The Spider Balloon-Borne CMB Polarimeter*"

June 2015 **Luke Keltner's** PhD defence on "*UV properties of Galileons*"

Feb. 2014 **Maud Jaccard's** PhD defence on "*Infrared Modifications of General Relativity and Nonlocal Massive Gravity*"

Jan. 2014 **Martina Falco's** PhD defence on "*Dynamics of Galaxy Clusters and their dynamics of galaxy clusters and their outskirts: beyond the virialization regime*"

Nov. 2013 **Marit Sandstad's** PhD defence on "*Certain cosmological implications of a selection of modified theories of gravity*"

Sept. 2013 **George Zahariade's** PhD defence on "*Massive gravity and scalar fields with derivative self-interactions*"

Feb. 2011 **Umberto Cannella's** PhD defence on "*Effective Field Theory Methods in Gravitational Physics and Tests of Gravity*"

Invited Summer School Lecturer

Jan. 2020 Mathematical Aspects of General Relativity (Aotearoa GR2020), New Zealand

Sept. 2019 Heraeus Summer School ("Saalburg Summer School") Germany

- June 2019 [ISAPP summer school on "The dark side of the Universe,"](#) Heidelberg, Germany
- June 2018 ICTP Summer School on Cosmology, Trieste, Italy
- 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

Recent Invited Talks

- July 2020 Invited [High Energy Seminar,](#) Caltech, USA
- April 2020 Invited Colloquium [John Hopkins,](#) USA [postponed to 2021]
- Dec 2019 Invited Plenary Speaker for [Texas 2019 Symposium,](#) Portsmouth, UK
- Nov 2019 Invited Seminar Speaker, QMUL, UK
- Sept 2019 Invited Speaker for [High Energy Theory Seminar,](#) EPFL, Switzerland
- May 2019 Invited Plenary Speaker for [Journée de Rham,](#) EPFL, Switzerland
- May 2019 Invited Plenary Speaker for [Anne Davis Celebration,](#) Cambridge University, UK
- May 2019 Invited Seminar [Liverpool University,](#) UK
- March 2019 Invited Colloquium [ETHZ,](#) Zurich, Switzerland
- March 2019 Invited Colloquium [University of Edinburgh,](#) UK
- Jan 2019 Invited Plenary Speaker at [The first EPS \(European Physical Society\) Conference on Gravitation,](#) Sapienza University, Rome, Italy
- Jan 2019 Invited Colloquium Speaker at [IISc,](#) Bangalore, India
- Jan 2019 Invited Plenary speaker at [Cosmology - The Next Decade,](#) ICTS Bangalore, India
- Jan 2019 Invited speaker at [6th LISA Cosmology Working Group Workshop,](#) Madrid, Spain
- Jan 2019 Invited Plenary speaker at [New Directions in Theoretical Physics III](#) conference, University of Edinburgh, UK

In addition to more than 150 previous invited research talks since 2005.

Recent Dissemination Activities

I have contributed to the dissemination of Science through summer school 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:

- Sept 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.
- August 2020 **Quanta Magazine Q&A**: "The Physicist Who Slayed Gravity's Ghosts", by Thomas Lewton.
- July 2020 **New Scientist Cover Story**: "What does gravity weigh?" invited article.
- June 2020 Invited contribution for [Quanta Magazine](#), "Why Gravity Is Not Like the Other Forces," edited by Natalie Wolchover.
- March 2020 Featured interview in [PhysicsWorld](#) podcast on careers in physics by Andrew Glester.
- March 2020 Invited Speaker and Panelist for Symposium "Game Changers: 9 Young Scientists Transforming Our World" hosted by the New York Academy of Sciences.
- Jan 2020 Saturday Feature article in [The Guardian](#), by Hannah Devlin.
- Jan 2020 Featured interview in [New Zealand Main Radio](#).
- Jan 2020 **New Scientist** interview for article on "What is Reality?"
- 2019-20 **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](#) by Spyros Argyropoulos (University of Iowa), Panos Charitos (CERN).
- 2018 **Radio Lac**, "Claudia de Rham, physicienne," radio interview.
- 2018 **Swiss National Radio**, "La gravitation au coeur du 18e colloque Wright à Genève," radio interview
- 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 by Colin Hunter.
- 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"
- 2018 Invited plenary speaker for the [Spring-Meeting of the German Physical Society 2018](#) in Wuerzburg, Germany.

- 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](#)," (General relativity to the test) by Philippe Pajot
 - 2013 **Nature**, "[Fat gravity particle gives clues to dark energy](#)," by Zeeya Merali
- + more than 30 invited public outreach talks and many more press coverage articles.

Publications

Complete list of publications available on [InSpires](#), author: [C.de.Rham.1](#).

Recent Submission

84. “[Positivity Bounds and the Massless Spin-2 Pole](#)”
L. Alberte, **C. de Rham**, S. Jaitly and A. J. Tolley, arXiv:2007.12667 [hep-th].
83. “[Proca-Nuevo](#)”
C. de Rham and V. Pozsgay, arXiv:2003.13773 [hep-th].

Research Papers Published in Peer-Reviewed Journals

82. “[Causality in Curved Spacetimes: The Speed of Light & Gravity](#)”
C. de Rham and A. J. Tolley, arXiv:2007.01847 [hep-th], accepted for publication in prd, in press.
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.
72. “[Scalar Gravitational Radiation from Binaries: Vainshtein Mechanism in Time-dependent Systems](#)” F. Dar, **C. de Rham**, J. T. Deskins, J. T. Giblin, A. J. Tolley, Class. Quant. Grav. 36 (2019) no.2, 025008.
71. “[On the \(A\)dS Decoupling Limits of Massive Gravity](#)”
C. de Rham, Kurt Hinterbichler, Laura A. Johnson, JHEP 1809 (2018) 154.
70. “[Gravitational Rainbows,^a](#)”
C. de Rham and S. Melville, Phys. Rev. Lett. **121** (2018) 221101.

^a According to the Web of Science, these [hot papers](#), published in the previous two years, received enough citations to place them in the top 0.1% of papers in Physics.

69. [“Positivity Bounds for Massive Spin-1 and Spin-2 Fields”](#)
C. de Rham, S. Melville, A. J. Tolley and S.Y. Zhou, JHEP 1903 (2019) 182.
68. [“Improved Positivity Bounds and Massive Gravity”](#)
C. de Rham, Scott Melville and Andrew J. Tolley, JHEP 1804 (2018) 083.
67. [“UV complete me: Positivity Bounds for Particles with Spin”](#)
C. de Rham, Scott Melville, Andrew J. Tolley and Shuang-Yong Zhou, JHEP 1803 (2018) 011.
66. [“Unitary NEC violation in \$P\(X\)\$ cosmologies”](#)
C. de Rham and Scott Melville, Phys.Rev. **D95** (2017) no.12, 123523.
65. [“Massive Galileon Positivity Bounds”](#)
C. de Rham, Scott Melville, Andrew J. Tolley and Shuang-Yong Zhou, JHEP 1709 (2017) 072.
64. [“Positivity Bounds for Scalar Theories”](#)
C. de Rham, Scott Melville, Andrew J. Tolley and Shuang-Yong Zhou, Phys.Rev. **D96** (2017) no.8, 081702.
63. [“Graviton Mass Bounds,^b”](#)
C. de Rham, J. T. Deskins, A. J. Tolley and S.Y. Zhou, Rev.Mod.Phys. **89** (2017) no.2, 025004.
62. [“Caustics for Spherical Waves”](#)
C. de Rham and Hayato Motohashi, Phys. Rev. **D95** (2017) 6, 064008.
61. [“Cosmology and fundamental physics with the Euclid satellite,”](#)
L. Amendola *et al.* [Euclid Theory Working Group Collaboration], Living Rev. Rel. **16**, 6 (2013), new edition.
60. [“Ostrogradsky in Theories with Multiple Fields”](#)
C. de Rham and Andrew Matas, JCAP 1606 (2016), 041.
59. [“The \$\Lambda_2\$ limit of massive gravity”](#)
C. de Rham, Andrew J. Tolley and Shuang-Yong Zhou, JHEP 1604 (2016) 188.
58. [“Non-compact nonlinear sigma models ”](#)
C. de Rham, Andrew J. Tolley and Shuang-Yong Zhou, Phys. Lett. **B760** (2016) 579-583.
57. [“Vielbein to the Rescue?”](#)
C. de Rham and A. J. Tolley, Phys. Rev. D 92 (2015) 2, 024024.
56. [“ New Kinetic Terms for Massive Gravity and Multi-gravity: A No-Go in Vielbein Form,”](#)
C. de Rham, A. Matas, and A. J. Tolley, Class. Quantum Grav. 32 (2015) 215027.
55. [“Interactions of Charged Spin-2 Fields,”](#)
C. de Rham, A. Matas, N. Ondo and A. J. Tolley, Class. Quantum Grav. 32 (2015) 17, 175008..
54. [“Stable FLRW solutions in Generalized Massive Gravity,”](#)
C. de Rham, M. Fasiello and A. J. Tolley, Int. J. Mod. Phys. D 23, 1443006 (2014), Special Issue on Modified Gravity and Effects of Lorentz Violation.
53. [“Ghosts & Matter Couplings in Massive \(bi-&multi-\)Gravity,”](#)
C. de Rham, L. Heisenberg and R. H. Ribeiro, Phys. Rev. D 90, 124042 (2014).

^bAccording to the Web of Science, based on the most recent 10 years of publications, these [highly cited papers](#) received enough citations to place them in the top 1% of the academic field of Physics based on a highly cited threshold for the field and publication year.

52. **"On couplings to matter in massive (bi-)gravity,"^{a, c, d}**
C. de Rham, L. Heisenberg and R. H. Ribeiro, *Class. Quantum Grav.* **32** (2015) 035022.
51. **"Riding on irrelevant operators,"**
C. de Rham and R. H. Ribeiro, *JCAP*11(2014)016.
50. **"Generalized Galileon Duality,"**
C. de Rham, L. Keltner and A. J. Tolley, *Phys. Rev. D* **90**, 024050 (2014).
49. **"Massive Gravity,"^{a, b}**
C. de Rham, *Living Rev. Rel.* **17**, 7 (2014).
48. **"New Kinetic Interactions for Massive Gravity?,"**
C. de Rham, A. Matas and A. J. Tolley, *Class. Quant. Grav.* **31**, 165004 (2014).
47. **"Deconstructing Dimensions and Massive Gravity,"^c**
C. de Rham, A. Matas and A. J. Tolley, *Class. Quant. Grav.* **31**, 025004 (2014).
46. **"Galileon Duality,"**
C. de Rham, M. Fasiello and A. J. Tolley, *Phys. Lett. B* **733**, 46 (2014).
45. **"Quantum Corrections in Massive Gravity,"**
C. de Rham, L. Heisenberg and R. H. Ribeiro, *Phys. Rev. D* **88**, 084058 (2013).
44. **"Mixed Galileons and Spherically Symmetric Solutions,"**
L. Berezhiani, G. Chkareuli, C. de Rham, G. Gabadadze and A. J. Tolley, *Class. Quant. Grav.* **30**, 184003 (2013).
43. **"Superluminality in the Bi- and Multi- Galileon,"**
P. de Fromont, C. de Rham, L. Heisenberg and A. Matas, *JHEP* **1307**, 067 (2013).
42. **"Evidence for and obstructions to nonlinear partially massless gravity,"**
C. de Rham, K. Hinterbichler, R. A. Rosen and A. J. Tolley, *Phys. Rev. D* **88**, no. 2, 024003 (2013).
41. **"Galileon Radiation from Binary Systems,"**
C. de Rham, A. Matas and A. J. Tolley, *Phys. Rev. D* **87**, no. 6, 064024 (2013).
40. **"Nonrenormalization and naturalness in a class of scalar-tensor theories,"^b**
C. de Rham, G. Gabadadze, L. Heisenberg and D. Pirtskhalava, *Phys. Rev. D* **87**, no. 8, 085017 (2013).
39. **"Vainshtein Mechanism in Binary Pulsars,"**
C. de Rham, A. J. Tolley and D. H. Wesley, *Phys. Rev. D* **87**, no. 4, 044025 (2013).
38. **"Massive Gravity on de Sitter and Unique Candidate for Partially Massless Gravity,"**
C. de Rham and S. Renaux-Petel, *JCAP* **1301**, 035 (2013).
37. **"Cosmology and fundamental physics with the Euclid satellite,"**
L. Amendola *et al.* [Euclid Theory Working Group Collaboration], *Living Rev. Rel.* **16**, 6 (2013).
36. **"Chronology Protection in Galileon Models and Massive Gravity,"**
C. Burrage, C. de Rham, L. Heisenberg and A. J. Tolley, *JCAP* **1207**, 004 (2012).

^aArticles selected by the Editorial Board of Classical and Quantum Gravity (CQG) as one of the journal's Highlights. Articles featured in the Highlights are chosen by the Board for their high interest, novelty and significance.

^dPublication selected by CQG for an 'insight' piece published in CQG+.

35. **"On Black Holes in Massive Gravity,^b"**
L. Berezhiani, G. Chkareuli, **C. de Rham**, G. Gabadadze and A. J. Tolley, Phys. Rev. D **85**, 044024 (2012).
34. **"Mode Spectrum of the Electromagnetic Field in Open Universe Models,"**
J. Adamek, **C. de Rham** and R. Durrer, Mon. Not. Roy. Astron. Soc. **423**, 2705 (2012).
33. **"Massive Cosmologies,^b"**
G. D'Amico, **C. de Rham**, S. Dubovsky, G. Gabadadze, D. Pirtskhalava and A. J. Tolley, Phys. Rev. D **84**, 124046 (2011).
32. **"Helicity Decomposition of Ghost-free Massive Gravity,"**
C. de Rham, G. Gabadadze and A. J. Tolley, JHEP **1111**, 093 (2011).
31. **"Ghost free Massive Gravity in the Stückelberg language,"**
C. de Rham, G. Gabadadze and A. J. Tolley, Phys. Lett. B **711**, 190 (2012).
30. **"Cosmology of the Galileon from Massive Gravity,"**
C. de Rham and L. Heisenberg, Phys. Rev. D **84**, 043503 (2011).
29. **"de Sitter Galileon,"**
C. Burrage, **C. de Rham** and L. Heisenberg, JCAP **1105**, 025 (2011).
28. **"Nonlinear Dynamics of 3D Massive Gravity,"**
C. de Rham, G. Gabadadze, D. Pirtskhalava, A. J. Tolley and I. Yavin, JHEP **1106**, 028 (2011).
27. **"Resummation of Massive Gravity,^b"**
C. de Rham, G. Gabadadze and A. J. Tolley, Phys. Rev. Lett. **106**, 231101 (2011).
26. **"Cosmic Acceleration and the Helicity-0 Graviton,^b"**
C. de Rham, G. Gabadadze, L. Heisenberg and D. Pirtskhalava, Phys. Rev. D **83**, 103516 (2011).
25. **"Galileon inflation,"**
C. Burrage, **C. de Rham**, D. Seery and A. J. Tolley, JCAP **1101**, 014 (2011).
24. **"Generalization of the Fierz-Pauli Action,^b"**
C. de Rham and G. Gabadadze, Phys. Rev. D **82**, 044020 (2010).
23. **"Selftuned Massive Spin-2,"**
C. de Rham and G. Gabadadze, Phys. Lett. B **693**, 334 (2010).
22. **"DBI and the Galileon reunited,^b"**
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