

email: ignacy.sawicki@fzu.cz **www:** ceico.cz/team/researchers/ignacy-sawicki
mobile: +420 702 222 133
ID: inspire-HEP – [I.Sawicki.1](#) **ORCID:** [0000-0003-2476-9730](#)

EDUCATION

2003-2007 University of Chicago, USA; Department of Physics
PhD Thesis: [Modified gravity as dark energy](#). Advisors: Sean Carroll and Wayne Hu
2002-2003 Imperial College London, UK, Dept. of Physics
MSci Quantum Fields and Fundamental Forces, Distinction
1995-1999 University of Cambridge, UK
MNatSci Natural Sciences (Physics), First-Class Honours

CURRENT POSITION

2017- Institute of Physics of Czech Academy of Sciences, Prague, Czech Republic
Senior Researcher
Deputy Head of Cosmology and Gravity Department (since 2022)
Leader, CEICO Research Project 1: “Late Universe”

PREVIOUS POSITIONS

2014-2016 University of Geneva, Switzerland
Marie Skłodowska-Curie Fellow, Dept. of Theoretical Physics
2014 African Institute of Mathematical Sciences, Cape Town, South Africa
Visiting researcher
2010-2013 University of Heidelberg, Germany
Postdoctoral researcher, Institute for Theoretical Physics
2007-2010 New York University, USA
James Arthur Postdoctoral Fellow, Center for Cosmology and Particle Physics
1999-2002 Morgan Stanley International, London, UK
Financial Analyst, Investment Banking Division

PRIZES AND FELLOWSHIPS (for grants, see section D2, page 7)

2014 Marie Skłodowska-Curie Fellowship (European Commission, €270k)
Project DRKFRS hosted at University of Geneva
2007 James Arthur Fellowship (New York University, \$200k)
2007 Gregor Wentzel Prize for Best Physics Thesis (University of Chicago)

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2022-24 Supervisor for MSCA (Horizon Europe) fellow L. Trombetta
2020- Supervision of PhD student (G. Trenkler)
PhD thesis committee H. Steigerwald (2015) and P. Jiroušek (2022)
2018-2022 Supervision of two postdocs (L. Reverberi and I. Saltas), CEICO, Prague
earlier: Co-supervision of one postdoc (E. Bellini) and one PhD student (M. Motta)

ORGANISATION OF INTERNATIONAL SCIENTIFIC MEETINGS

2018 & 2022 Gravity@Prague school for 80 advanced PhD students, main organiser
2021 Synergies@Prague workshop with 20 speakers, co-organiser
2019 MultiMessenger@Prague workshop with 20 speakers and 40 attendees, co-organiser
earlier: Co-organiser of 2 advanced schools and 1 international conference.

REVIEWING ACTIVITIES

- Journals referee for more than 100 articles for Physics Review Letters, Journal of Cosmology and Astroparticle Physics, Physics Review D, Physics Letters B, Monthly Notices of the Royal Astronomical Society and others.
- Agencies Evaluator for NWO (Netherlands). DFG (Germany), ETAg (Estonia), FONDECYT (Chile)

PUBLIC CODES

- hi_class Implementation of modified gravity in the CLASS Einstein-Boltzmann code. Used by around 40 groups including Planck and Euclid

INVITED TALKS AT INTERNATIONAL CONFERENCES

- 3.11.2019 "Where to in Dark Energy", AstroPart conference, Saclay France
- 22.01.2019 "Dark energy, Modified Gravity and LIGO", Winter Mini-Workshop, Univ. of Warsaw, Poland
- 19.06.2018 "Modified Gravity, After LIGO", 14th Patras Workshop, DESY, Hamburg, Germany
- 09.09.2017 "Vorticity in the Time of Galaxy Surveys", DARKMOD, Saclay, France
- 04.04.2016 "Disambiguating the Dark Side", Theoretical Cosmology in the Era of Large Surveys, GGI, Florence, Italy
- earlier: 13 invited talks at international conferences

INVITED LECTURE SERIES TO ADVANCED SCHOOLS

- June 2019 Gravitational Wave Challenges and Cosmology, summer school of the International Institute of Physics, Natal, Brazil
- June 2018 Summer School on Large-Scale Structure, Max Planck Institute, Berlin, Germany
Dark energy and Modified Gravity
- July 2018 4th Jagiellonian School on Cosmology, Kraków, Poland
Dark energy and Modified Gravity
- Nov 2014 Xth Mexican School on Gravitation, Playa del Carmen
Cosmology in the Time of Dark Energy

MEDIA APPEARANCES

- Feb 2022 Seznam.cz: <https://www.seznampravy.cz/clanek/zahranicni-vesmirna-megasrazka-obricernejedinyse-mozna-stretnou-uz-za-sto-dni-187487>
- Nov 2021 Polish TVP1: *Astronarium* Ep. 129 *Dark Energy*
<https://www.youtube.com/watch?v=3Y1GPZCapxY>

SELECTED PUBLICATIONS RELEVANT TO PROPOSAL IN LAST 5 YEARS

Author of 38 refereed primary journal articles and contributor to two review articles. My work has so far gained over 7900 citations (7200 excluding self-citations), giving me an h-index of 32 according to the Inspire-HEP database. 20 of these papers have more than 100 citations.

1. T. Baker, E. Bellini, P. G. Ferreira, M. Lagos, J. Noller, and I. Sawicki, *Strong constraints on cosmological gravity from GW170817 and GRB 170817A*, [Phys.Rev.Lett. 119 \(2017\) 25 \[586\]](#) (PRL Editor's Suggestion)
2. M. Zumalácarregui, E. Bellini and I. Sawicki, J. Lesgourges, and P.G. Ferreira, *hi_class: Horndeski in the Cosmic Linear Anisotropy Solving System*, [JCAP 08 \(2017\) 019 \[146\]](#)
3. L. Amendola, M. Kunz, I. D. Saltas, I. Sawicki, *Fate of Large-Scale Structure in Modified Gravity After GW170817 and GRB170817A*, [Phys. Rev. Lett. 120 \(2018\) 13 \[103\]](#)
4. L. Amendola, I. Sawicki, M. Kunz, I. D. Saltas, *Direct detection of gravitational waves can measure the time variation of the Planck mass*, [JCAP 08 \(2018\) 030 \[63\]](#)
5. I. D. Saltas, I. Sawicki and I. Lopez, *White dwarfs and revelations*, [JCAP 05 \(2018\) 028 \[40\]](#)