

BIOGRAPHICAL SKETCH: Julio Parra-Martinez

35 Route de Chartres, 91440, Bures-sur-Yvette, France

Email: julio@ihes.fr Web: <https://www.ihes.fr/~julio>

Research Interests: Quantum Field Theory, Scattering Amplitudes, Effective Field Theory, Gravitation, String Theory.

Appointments

2024–	Permanent Professor	Institut des Hautes Études Scientifiques (IHES)
2023–2024	Assistant Professor	University of British Columbia (UBC)

Temporary Appointments

2026–2029	Visiting Professor	Korea Institute for Advanced Study (KIAS)
2020–2023	Burke Fellow	California Institute of Technology (Caltech)

Education

University of California, Los Angeles (UCLA)	Physics	Ph.D. 2020
University of Cambridge	Applied Mathematics	M.A.St. 2015
Universitat de València	Physics	Grado (B.Sc.) 2014

Honors and Awards

2025	ERC Starting Grant
2020-2023	Sherman Fairchild Prize Fellowship in Theoretical Physics, Caltech
2015-2020	Fulbright Fellowship
2015	Mayhew Prize, University of Cambridge
2014	1 ^{er} Premio Nacional Fin de Carrera de Física, España.

Selected Publications (Full record available at [INSPIRE-HEP](#) or [Google Scholar](#).)

- **Resummation of Universal Tails in Gravitational Waveforms**, Phys.Rev.Lett. **135** (2025) no.14, 141401 (with M. M. Ivanov, Y. Z. Li, Z. Zhou)
- **Gravitational Raman scattering in effective field theory: a scalar tidal matching at $\mathcal{O}(G^3)$** , Phys.Rev.Lett. **132** (2024) 13, 131401 (with M. Ivanov, Y-Z. Li, Z. Zhou)
- **Effective field theory for extreme mass ratio binaries**, Phys.Rev.Lett. **132** (2024) 9, 091402, (with C. Cheung , I. Z. Rothstein, N. Shah , J. Wilson-Gerow)
- **Scattering amplitudes, the tail effect, and conservative binary dynamics at $\mathcal{O}(G^4)$** , Phys.Rev.Lett. **128** (2022) 16, 161103 (with Z. Bern, R. Roiban, M. Ruf et al.)
- **Causality constraints on corrections to Einstein gravity**, JHEP **05** (2023), 122 (with S. Caron-Huot, Y-Z. Li, D. Simmons-Duffin)
- **Geometric soft theorems**, JHEP **04** (2022), 011 (with C. Cheung, A. Helset)

- **Scattering amplitudes and conservative binary dynamics at $\mathcal{O}(G^4)$** , Phys.Rev.Lett. 126 (2021) 17, 171601 (with Z. Bern, R. Roiban, M. Ruf, C-H. Shen, M. Solon et al.)
- **Gravitational bremsstrahlung from reverse unitarity**, Phys.Rev.Lett. 126 (2021) 20, 201602, (with E. Herrmann, M. Ruf, M. Zeng)
- **Classification of string theories via topological phases**, Phys.Rev.Lett. 124 (2020) 12, 121601 (with J. Kaidi, Y. Tachikawa)

Recent Invited Conference Talks (Selected)

Jun 2025	Amplitudes 2025 , Seoul National University, Seoul, South Korea
Jan 2025	Strings 2025 , NYU Abu Dhabi, UAE.
Dec 2024	QCD Meets Gravity 2024 , NTU, Taipei, Taiwan.
Sep 2024	Korea-France workshop on string theory , KIAS, Seoul, South Korea
Sep 2024	Amplitudes Meets Cosmology 2024 , Vidago, Portugal
Jan 2024	Iberian Strings 2024 , Porto, Portugal
Dec 2023	Indian Strings Meeting 2023 , IIT, Mumbai, India
Aug 2023	Strings 2023 , Perimeter Institute, Waterloo, ON, Canada.
Apr 2023	APS April Meeting , Invited Talk, Minneapolis, MI, USA
Aug 2022	Amplitudes 2022 , Charles University, Prague, Czech Republic
Aug 2022	Bohr-100 , NBI, Copenhagen, Denmark
May 2022	Amplitudes Meets Cosmology 2022 , Gleneagles Hotel, Scotland
Apr 2022	APS April Meeting , Invited Talk, New York, NY, USA

Grants

2026–2031	ERC Starting Grant (GravitaS, 101221094) 1.500.000 EUR.
2024–2029	NSERC Subatomic Physics Envelope personal grant (SAPIN-2024-00036) 275.000 CAD.

Service to the Profession

- **Reviewer:** Natural Sciences and Engineering Research Council of Canada (NSERC).
- **Referee:** Journal of High Energy Physics, Physical Review D, Physical Review Letters, Physical Review X, Physics Letters B, Physics Reports, Mathematical Reviews.
- **Organizer:** *QCD Meets Gravity 2021*, *California Amplitudes Meeting 2021*, *Aspen summer workshop 2025*, *Symmetry and Topology in Particle Physics 2026* (upcoming)
- **Member of Scientific Committee:** *Strings 2026*.
- **Lecturer:** GGI lectures 2021, TASI 2024, Amplitudes Summer School 2025, HoloGrav 2025, Atrani 2025, Asian Winter School 2025, NBI School on Gravity 2026 (upcoming).