

## BIOGRAPHICAL SKETCH: Julio Parra-Martinez

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**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	Fullbright Fellowship
2015	Mayhew Prize, University of Cambridge
2014	1 <sup>er</sup> 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	<b>Amplitudes 2025</b> , Seoul National University, Seoul, South Korea
Jan 2025	<b>Strings 2025</b> , NYU Abu Dhabi, UAE.
Dec 2024	<b>QCD Meets Gravity 2024</b> , NTU, Taipei, Taiwan.
Sep 2024	<b>Korea-France workshop on string theory</b> , KIAS, Seoul, South Korea
Sep 2024	<b>Amplitudes Meets Cosmology 2024</b> , Vidago, Portugal
Jan 2024	<b>Iberian Strings 2024</b> , Porto, Portugal
Dec 2023	<b>Indian Strings Meeting 2023</b> , IIT, Mumbai, India
Aug 2023	<b>Strings 2023</b> , Perimeter Institute, Waterloo, ON, Canada.
Apr 2023	<b>APS April Meeting</b> , Invited Talk, Minneapolis, MI, USA
Aug 2022	<b>Amplitudes 2022</b> , Charles University, Prague, Czech Republic
Aug 2022	<b>Bohr-100</b> , NBI, Copenhagen, Denmark
May 2022	<b>Amplitudes Meets Cosmology 2022</b> , Gleneagles Hotel, Scotland
Apr 2022	<b>APS April Meeting</b> , 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, Mathematical Reviews.
- **Organizer:** *QCD Meets Gravity 2021*, *California Amplitudes Meeting 2021*, *Aspen summer workshop 2025*.
- **Member of Scientific Committee:** *Strings 2026*.
- **Lecturer:** GGI lectures 2021, TASI 2024, Amplitudes Summer School 2025, HoloGrav 2025, Atrani 2025, Asian Winter School Asian Winter School 2026, NBI School on Gravity 2026 (upcoming).