Alan Rios Fukelman

Curriculum Vitae

Education

- 2018–2022 **PhD**, The planar limit of $\mathcal{N}=2$ Lagrangian superconformal field theories (Advisor: Prof. Bartomeu Fiol Nuñez), Institut de Ciències del Cosmos, Barcelona, Spain.
- 2009–2017 **Master in Theoretical Physics**, *Wilson Loops for higher rank representa*tions in AdS/CFT, (Advisor: Prof. Diego H. Correa), Universidad de Buenos Aires, Buenos Aires, Argentina, *GPA*: 9.07/10.

Awards & Scholarships

2018-2022 **FPI**, Scholarship from the Ministerio de Ciencia e Innovación (Spanish Government).

Publications

- 2021 On the planar free energy of matrix models, Bartomeu Fiol and Alan Rios Fukelman, JHEP (02) 078, [arXiv:2111.14783].
- 2021 The planar limit of $\mathcal{N}=2$ chiral correlators, Bartomeu Fiol and Alan Rios Fukelman, JHEP (08) 032, [arXiv:2106.04553].
- 2020 The planar limit of $\mathcal{N}=2$ superconformal quiver theories, Bartomeu Fiol, Jairo Martínez-Montoya and Alan Rios Fukelman, JHEP (08) 161, [arXiv:2006.06379].
- 2020 The planar limit of $\mathcal{N}=2$ superconformal field theories, Bartomeu Fiol, Jairo Martínez-Montoya and Alan Rios Fukelman, JHEP (05) 136, [arXiv:2003.02879].
- 2019 **Wilson loops in terms of color invariants**, *Bartomeu Fiol, Jairo Martínez-Montoya and Alan Rios Fukelman*, JHEP (05) 202, [arXiv:1812.06890].
- 2018 **Dyson equations for correlators of Wilson loops**, *Diego Correa, Pablo Pisani, Alan Rios Fukelman and Konstantin Zarembo*, JHEP (12) 100, [arXiv:1811.03552].
- 2018 Ladder limit for Correlators of Wilson Loops, Diego Correa, Pablo Pisani and Alan Rios Fukelman, JHEP (05) 168, [arXiv:1803.02153].

Research Talks

- The planar limit of $\mathcal{N}=2$ superconformal field theories and chiral correlators, *University of Torino*, *Italy*.
- The planar limit of $\mathcal{N}=2$ superconformal field theories and chiral correlators, *Online seminar at Nordita, Sweden*.
- The planar limit of $\mathcal{N}=2$ superconformal field theories, Online seminar at the DESY String theory group..
- 2021 **Wilson Loops: A window to the unknown**, *Online Colloquium at the Institut of Cosmos Sciences.*, Barcelona, Spain..
- 2020 Solving $\mathcal{N}=2$ superconformal field theories, Online Seminar at the String Theory Group in the Instituto de Física de La Plata., La Plata, Argentina.
- 2018 **A ladder limit for the correlator of Wilson Loops**, Seminar given at the Instituto de Ciencias del Cosmos, Universidad de Barcelona, Barcelona, Spain.
- 2016 **Higher rank representations of Wilson Loops in** AdS/CFT, Seminar given at the String Theory Group of the Instituto de Física de La Plata, La Plata, Argentina.
- Wilson Loops in the AdS/CFT correspondence, Seminar given at the Pontificia Universidad Católica, Santiago de Chile, Chile.

Schools & Workshops

- 2021 Siembra-HoLAGrav Young Frontiers Meeting II (Organizer), September 6-8, online.
- 2021 Strings 2021, June 21 July 2. ICTP-SAIFR, São Paulo.
- 2021 **Pre-Strings 2021**, June 14-18. International Institute of Physics, Federal University of Rio Grande do Norte, São Paulo.
- 2021 Iberian Strings 2021, January 19-22. IST, Lisbon.
- 2020 **Siembra-HoLAGrav Young Frontiers Meeting (Organizer)**, *December 16-18, online.*
- 2020 **2nd Latin American Workshop on Gravity and Holography**, *July 20–24 2020, online*.
- 2020 **Strings 2020**, June 29–July 3 2020, online.
- 2020 YRIS 2020: A modern primer for Superconformal field theories, February 9-16 2020, DESY, Hamburg, Germany.
- 2019 LACES, Lezioni Avanzate de Campi e stringhe, Galileo Galilei Institute for Theoretical Physics, Firenze, Italia.
- 2019 ICTP Spring School on Superstring Theory and Related Topics, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italia.

- 2019 CERN Winter School on Supergravity, Strings and Gauge Theor, Ginebra, Suiza.
- 2019 **Iberian Strings**, Institut de Ciències del Cosmos, Universitat de Barcelona.
- 2018 LACES, Lezioni Avanzate de Campi e stringhe, Galileo Galilei Institute for Theoretical Physics, Firenze, Italia.
- 2018 School on Supersymmetric Localization, Holography and Related Topics, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italia.
- 2018 ICTP Spring School on Superstring Theory and Related Topics, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italia.
- 2017 **Introduction to Quantum Field Theory II**, Post graduate course at the Instituto de Física de La Plata, lectured by Prof. Horacio Falomir.
- 2017 School on Quantum Field Theory, Condensed Matter and Information Theory, Instituto Balseiro, Bariloche, Argentina, Final Grade 9/10.
- 2017 **The SYK model and Black Holes**, Advanced Topics in High Energy Physics, Juan Martín Maldacena, Instituto de Física del Espacio, UBA.
- 2017 **Introduction to Quantum Field Theory I**, Post graduate course at the Instituto de Física de La Plata, lectured by Prof. Horacio Falomir.
- 2016 **String theory, dimensional reduction and effective actions**, *Lectures in High Energy Physics, Mariana Graña, Departamento de Física, UBA*.
- 2016 **Strings @ar Congress**, Instituto de Astronomía y Física del Espacio, UBA.
- 2016 **Strings @ar Summer Congress**, Instituto de Astronomía y Física del Espacio, UBA.
- 2015 **Advanced Topics in superstring theory**, Lectures in High Energy Physics, Jorge Russo, Departamento de Física, UBA.

Work Experience

- 2019-2021 **Teaching Assistant**, *Universitat de Barcelona*, Barcelona, Spain.
 - 2017 **Teaching Assistant**, *Physics Department*, *FCEyN*, *Universidad de Buenos Aires*, Buenos Aires, Argentina.

Languages

Spanish Native

English Fluent TOEFL: : 110/120

Catalan B1