Héctor Ramírez Curriculum vitæ

Present | FPI PhD fellow in Theoretical Physics

Position Instituto de Física Corpuscular (IFIC) & Department of Theoretical Physics

University of Valencia

Parque Científico, C/Catedrático José Beltrán, 2. Paterna, 46980; Spain.

(+34)693012381 — vanhramirez@gmail.com

https://www.linkedin.com/in/harr/ & https://www.uv.es/rarohec/

Nationality Mexican — Current residence: Spain

Brief summary I have published 8 refereed scientific articles on data analyses and mathematical mod-

eling regarding the early-universe cosmology. All these publications were the result of individual specific projects, some of which were led by myself and in collaboration with people from the US, Japan, Italy, Germany and Spain. Furthermore, I have been a visiting researcher in important institutes in Italy, Chicago, Tokyo and the UK, where I collaborated with local people, gave talks and seminars (18 so far), led weekly meetings and contributed to outreach activities. Additionally, I have taught university-level courses during the last four years and served as a referee for scientific journals.

Last update: April, 2019.

Education

PhD in Physics University of Valencia, Spain.

2015-2019 Dissertation: 'Noncanonical Approaches to Inflation'

MA in Advanced University of Valencia, Spain.

Physics 2013-2014 Dissertation: 'The Hu-Sawicki Model of Modified Gravity'

BA in Physics University of Veracruz, Mexico.

2018-2013 Dissertation: 'Quantum Chaos in the Dicke Model'

2012 Academic exchange semester, University of Valencia, Spain.

Professional Experience

Long Research Stays

Apr - Jun, 2018	Institute of Cosmology and Gravitation, University of Portsmouth

Jan - Mar, 2018 Kavli IPMU, The University of Tokyo

May - Aug, 2017 | Fermi National Accelerator Laboratory (Fermilab) and

Kavli Institute for Cosmological Physics - The University of Chicago

Apr - Jun, 2015 Abdus Salam International Center for Theoretical Physics (ICTP)

Trieste, Italy.

Mar - May, 2014 NEXT Experiment, Instituto de Física Corpuscular (IFIC)

Valencia, Spain.

Teaching

Classical Department of Theoretical Physics, University of Valencia.

Mechanics Teaching Assistant: Resolution of problems, examinations and grading.

Introductory Department of Theoretical Physics, University of Valencia.

Physics Teaching Assistant: Resolution of problems, occasional lectures, examinations and

2015-2018 grading.

2017-2019

Journal referee

I have referred scientific articles for the journals **Physical Review Letters** and **Physical Review D**, both from the American Physical Society (USA).

Awards and Fellowships

2015 - 2019	FPI Research fellow by the <i>Ministry of Economy, Industry and Competitiveness</i> (MINECO), Spanish Government.
$\mathrm{Jul}\text{-}\mathrm{Sep},2014$	Research scholarship granted by the University of Valencia
Jan - Jul, 2011	Grant for an abroad academic exchange semester by the University of Veracruz Carried out at the Faculty of Physics, <i>University of Valencia</i> .
2009 - 2011	Faculty award due to academic excellence (x2) University of Veracruz

Publications

A total of 8 research articles published either in **Physical Review D** (Astronomy & Astrophysics – Scie.; Physics, Particles & Fields — Scie.) [Impact factor: 4.568] (x5); **Journal of Cosmology and Astroparticle Physics** (Astronomy & Astrophysics – Scie.; Physics, Particles & Fields – Scie.) [Impact factor: 4.734] (x2); **Physics of the Dark Universe** (Astronomy & Astrophysics – Scie.) [Impact factor: 5.425] (x1).

My total list of publications can be found in my Inspire page: http://inspirehep.net/author/profile/H.Ramirez.1

\blacksquare Talks

Conference talks 5 conference talks in Valencia, Paris, Teruel (Spain), Kyoto (Japan) and Portsmouth (UK).

Seminar talks in Valencia (x2), Paris (x2), Tokyo, London, Portsmouth (UK), New York, Chicago, UC Berkeley (USA), Schladming (Austria) and Veracruz (Mexico).

Skills

Computer Python: Numpy, Scipy, Pandas, Matplotlib, GetDist, etc.

knowledge Mathematical software: Wolfram Mathematica.
Office suits: LATFX, Microsoft Office, Apple iWork.

Basic knowledge of \mathbf{HTML} and \mathbf{CSS} .

Languages | Spanish: Native; English: Fluent; French: B2 level. I have also taken German and

Italian courses.

Sports Highly active in organizing, managing and participating in sport teams, mainly on

football soccer —I have joined and organized football teams in every place I have

done a research stay.

References

Dr. Olga Mena Requejo

Instituto de Física Corpuscular (IFIC) University of Valencia (+34) 963543534 — omena@ific.uv.es

Prof. Shinji Tsujikawa

Department of Physics Tokyo University of Science shinji@rs.kagu.tus.ac.jp

Teaching References:

Prof. Santiago Noguera

Instituto de Física Corpuscular (IFIC) University of Valencia (+34) 963544189 — Santiago.Noguera@uv.es

Prof. David Wands

Institute of Cosmology and Gravitation University of Portsmouth +44 (0)23 9284 5151 — david.wands@port.ac.uk

Prof. Wayne Hu

Kavli Institute for Cosmological Physics The University of Chicago whu@background.uchicago.edu

Prof. José Peñarrocha

Department of Theoretical Physics University of Valencia (+34) 963544513 — Jose.A.Penarrocha@uv.es