

Curriculum vitae

PERSONAL INFORMATION

Umberto Natale

Dipartimento di Fisica e Scienze della Terra,
Università degli Studi di Ferrara,
via Saragat 1, I-44122 (FE), Italy
Gender Male | Nationality Italian

EDUCATION AND TRAINING

02/11/2017 - Present

PhD in Physics

"Università degli Studi di Ferrara", Ferrara

Topics: He will deal with the study, from a phenomenological point of view, of some CMB anomalies trying to identify possible theoretical models able to take them into account.

01/10/2015 - 28/09/2017

Master's degree in Physics, final mark 110/110 cum Laude

"Università degli Studi di Padova", Padova

Date of Master's degree: 18/09/2017

Thesis Title: Exploring models for Cosmic Microwave Background Anomalies

Supervisor: Professor Nicola Bartolo

17/09/2012 - 30/09/2015

Bachelor's degree in Physics, final mark 110/110 cum Laude

"Seconda Università degli Studi di Napoli", Caserta

Date of Bachelor's degree: 30/09/2015

Thesis Title: The problem related to Nuclear Matrix Element in double beta decay without neutrinos

Supervisor: Dr. Luigi Coraggio

SCIENTIFIC CONTRIBUTION

27/05/2020 - under review

A novel CMB polarization likelihood package for large angular scales built from combined WMAP and Planck LFI legacy maps, *submitted to A&A*

e-print: [arXiv:2005.05600](https://arxiv.org/abs/2005.05600) [astro-ph.CO]

Authors: U. Natale, L. Pagano, M. Lattanzi, M. Migliaccio, L. P. Colombo, A. Gruppuso, P. Natoli, G. Polenta

28/08/2019 Is the lack of power anomaly in the CMB correlated with the orientation of the Galactic plane?, *JCAP* 12 (2019) 052
e-print: arXiv:1908.10637 [astro-ph.CO]
Authors: U. Natale, A. Gruppuso, D. Molinari, P. Natoli

05/06/2019 Isotropic non-Gaussian g_{NL} -like toy models that reproduce the Cosmic Microwave Background anomalies, *A&A* 626, A13 (2019)
e-print: arXiv:1806.08531 [astro-ph.CO]
Authors: F.K. Hansen, T. Trombetti, N. Bartolo, U. Natale, M. Liguori, A.J. Banday, K.M. Górski

ATTENDED SCHOOLS

11/03/2019 - 22/03/2019 Theoretical aspects of Astroparticle physics, Cosmology and gravitation, Arcetri (FI), Italy

CONTRIBUTED SEMINARS AND TALKS

14/12/2019 - 19/12/2019 *Texas Symposium: Relativistic Astrophysics*, Porstmouth, UK

03/04/2019 - 05/04/2019 *Universum III - Early Universe: Theory and Observations*, Milan, Italy

TEACHING EXPERIENCE

2018/2019 *Teaching Assistant*, University of Ferrara, Elementi di Meccanica Quantistica

ADDITIONAL INFORMATION

Research Interests His field of interest is Cosmology. In particular, he is fascinated and has a great time studying Primordial Cosmology with a focus on:
– Theoretical and Observational Cosmology
– CMB Anomalies
– Large scale Polarization Data
– Primordial non-Gaussianity
– Inflation in early Universe

Computer skills *Good knowledge of:* Python, Fortran 90, C, C++, Microsoft Office package, ROOT software
Basic knowledge of / I have experienced with: IDL, Matlab, Mathematica

Soft skills Goal-oriented attitude
Able to self-organize, to mach deadlines and manage time properly

Teamworker, but I enjoy also working on subjects on my own
High flexibility

Umberto Natale

Non viene apposta la firma, a tutela dei dati della persona interessata, ai sensi del Regolamento UE 2016/679 e del d.lgs. 196/2003 aggiornato al d.lgs. n.101/2018.