

CURRICULUM VITAE

Dr. Andrea Zanzi



FAMILY NAME: Zanzi Ferrara – May 11, 2016
FIRST NAME: Andrea
BIRTHPLACE: Ferrara (Italy)
DATE OF BIRTH: April 10, 1979
NATIONALITY: Italian
MARITAL STATUS: Married, one daughter
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University of Ferrara (Italy)
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EDUCATION:

December 2003-March 2007: PhD in Physics at Padova University
(Supervisor: Prof. A. Masiero).

PhD thesis: *Aspects of the Dark Energy problem in brane theories.*

Fall 2003 - Padova University: I won the PhD competitive examination in Padova.

Fall 2003 - Scuola Normale Superiore (Pisa): I have been declared eligible for the PhD in Physics (perfezionamento classe di Scienze) with the general score 8/10.

July 2003: I graduated in Physics *cum laude* at Ferrara University discussing a thesis entitled “Asteroseismology and extrasolar planets” (Supervisors: Prof. G. Fiorentini and Prof. S.Ortolani).

September 1998 – July 2003: I passed all the examinations of the degree in Physics at Ferrara University with the highest score (30/30).

RESEARCH POSITIONS:

August 2014: I worked at the University of Ferrara.

January-June 2009: I worked at College de France (Paris).

Supervisor: Prof. G.Veneziano.

November-December 2008: I worked at the Physics institute in Padova.

October 2006 – September 2008: I worked at the Physics Institute in Bonn (postdoctoral position). Supervisor: Prof. Hans-Peter Nilles.

TEACHING EXPERIENCE:

Academic year 2015/16: I teach the exercises of classical physics at the University of Ferrara (1st year of the degree in physics) and I am member of the board of the examiners.

Academic year 2014/15: I had a position at the University of Ferrara to teach the exercises of analytical mechanics (2nd year of the degree in physics – this is a 2-semester course) and of classical physics (“Fisica Generale 1”, second semester of the first year of the degree in Physics). I was member of the board of the examiners for both courses.

June-September 2014: I was member of the board of the examiners for classical physics (Fisica Generale 1) at the University of Ferrara.

29 Apr 2014 – 6 June 2014: I taught the exercises of fluid mechanics and thermodynamics at the University of Ferrara (first year of the degree in Physics).

17 Mar 2014 – 26 Mar 2014: I taught mathematics at the high-school IPSSAR "O. Vergani" (Ferrara) as a substitute teacher.

22 Oct 2013 – 20 Nov 2013: I taught mathematics and physics at the high-school Liceo Classico "L. Ariosto" (Ferrara) as a substitute teacher.

14 Jan 2013 – 12 Mar 2013: I taught mathematics (as a substitute teacher) at the high-school IPSIA “Ercole I d’Este” Ferrara.

3 Oct 2012 – 6 Dec 2012: I taught physics at Istituto Istruzione Superiore “R. Brindisi”, Lido degli Estensi (Ferrara) as a substitute teacher

20 Feb 2012 - 06 Mar 2012: I taught mathematics and physics at Liceo Scientifico in Codigoro (Ferrara) as a substitute teacher.

I gave private lectures on mathematics and physics (also in collaboration with educational centres and groups in Ferrara).

SUMMER SCHOOLS, WORKSHOPS AND SEMINARS:

- *Second European Summer School on Nuclear Astrophysics*, Catania, 28/09/03-05/10/03;
- *Eddington Workshop*, O.A.R., Monteporzio Catone, 17-18 Oct 2003.
- ISAPP 2004 - *International School on Astroparticle Physics (European Doctorate School)* – Laboratori Nazionali del Gran Sasso, Assergi (L'Aquila), 28 June- 9 July 2004.
- *XIII Seminario Nazionale di Fisica Teorica*, Parma 30 Aug 2004 - 4 Sept 2004.
- *11th International Workshop on Neutrino Telescopes*, Venezia, 22-25 Feb 2005.
- *Ecole d'Eté de Physique Theorique (Les Houches)* – Session LXXXIV, Particle Physics Beyond the Standard Model, 1 Aug 2005 – 26 Aug 2005. During this summer school I held a seminar.
- *9th International Workshop on Particle Physics and the early Universe* – COSMO 05, Bonn 28/08/05-01/09/05.
- *ENTApP Workshop on Dark Matter*, SISSA, Trieste 19-20 Oct 2005.
- *IDAPP's two days meeting, International Doctorate on Astroparticle Physics*, Ferrara 12-13 May 2006.
- Summer Institute, *New trends in Particle Physics and Cosmology*, Sheffield 19-23 June 2006. During this summer school I held a seminar.
- *Workshop on Astroparticle and Cosmology*, Galileo Galilei Institute for Theoretical Physics, Arcetri, Florence. 23 Oct – 8 Nov 2006. During this workshop I held a seminar.
- *RTN Winter School on Strings, Supergravity and Gauge Theories*. CERN, January 15- January 19, 2007.
- *LHC-D: Beyond the Standard Model*, Bonn 22-23 Feb 2007.
- *XIX Workshop beyond the Standard Model*. March 12-15 2007, Bad Honnef – Germany.
- *Kosmologietag*. April 26-27 2007, Bielefeld. During this workshop I held a seminar.
- *Planck 07*. June 9-13 Warsaw, Poland. During this meeting I held a seminar.
- *Pascos 07*. July 2-7 London, UK.
- *TRR33 meeting in Bad Honnef*. October 1-5 2007, Bad Honnef,

Germany.

- *Dezember Symposium, DESY*. December 4-5 2007, Hamburg, Germany. During this meeting I held a seminar.
- *RTN Winter School, CERN, Switzerland* 21-25 Jan 2008.
- *XX Workshop. Beyond the Standard Model*. March 10-13, Bad Honnef, Germany. During this workshop I held a seminar
- *String Phenomenology and Dynamical Vacuum Selection*. March 27-29, Liverpool, UK. During this conference I held a seminar.
- *Planck 08*. May 19-23, Barcelona, Spain. During this meeting I held a seminar.
- I have been invited as speaker for a seminar at SISSA (*International School for Advanced Studies*), Trieste, 29 Mar 2006.
- I have been invited as speaker for a seminar at Physikalisches Institut, Bonn, 13 June 2006.
- I held the following Tuesday-seminars in Bonn:

a. 28 November 2006 - Moduli Stabilization and the Cosmological Constant problem.

b. 6 February 2007 - Introduction to Chameleon Gravity

c. 6 November 2007 - Fluxes, Gaugino Condensates and Moduli Stabilization in Meta-stable Heterotic Vacua.

- I held a seminar at SISSA (*International School for Advanced Studies*), Trieste, 30 Nov 2007.
- 7-11 Jan 2008: I visited the Institute of Theoretical Physics in Heidelberg and I held a seminar.
- I held a seminar in Bonn, 8 May 2008.
- I held a seminar ("Pheno-Coffee") in Padova, 25 Nov 2008.
- *Workshop on supersymmetry, quantum gravity and gauge fields*, Scuola Normale Superiore, Pisa. September 12-14, 2012.
- I have been invited to give a seminar at Dipartimento di Fisica in Ferrara (Italy). I held the seminar on January 9, 2013.
- I have been invited to give a seminar at Scuola Normale Superiore, Pisa (Italy). I held the seminar on February 26, 2013.
- 18-21 Mar 2013. I attended the lectures at the workshop "Higher spins, strings and duality" at the Galileo Galilei Institute for

Theoretical Physics in Arcetri, Florence.

- 16-19 Apr 2013. I visited the Arnold Sommerfeld Center for Theoretical Physics in Munich and I held a seminar.
- 28 May 2013. I held a seminar at Centre de Physique Theorique (Ecole Polytechnique) in Paris.
- 19-22 Aug 2013. I visited CERN.
- Sep-Oct 2013. I attended various lectures and seminars at the workshop "Geometry of strings and fields" (Galileo Galilei Institute – Florence).
- 01-04 Oct 2013. I visited CERN.
- 19-20 Dec 2013. I attended the conference "A passion for particles", Scuola Normale Superiore, Pisa.
- September 2014. 7th International Workshop DICE2014 – Castiglioncello (Italy). "Spacetime, Matter, Quantum Mechanics". I have been invited to participate in the conference. During the conference I held a seminar in plenary session.
- 9-12 February 2015. I have visited the Institute of Theoretical physics in Cologne (Germany) where I held an (invited) seminar.
- 18-20 March 2015. I visited LPTHE at University of Paris 6 (UPMC).
- 7-8 March 2016. I have visited the physics department of Roma Tor Vergata and I held a seminar.
- 21 March - 1 April 2016 and also 11-15 April 2016. Galileo Galilei Institute for Theoretical Physics (Florence). I have attended various seminars and interacted with various participants of the workshop "Theoretical Cosmology in the era of large surveys".

Scientific Papers:

- 1) A. Zanzi
"Neutrino Dark Energy and Moduli Stabilization in a BPS Braneworld Scenario",
Phys. Rev. D73 (2006) 124010.
- 2) V. Loewen, H.P. Nilles, A. Zanzi
"Gaugino condensation with a doubly suppressed gravitino mass",
Phys. Rev. D78 (2008) 046002.
- 3) A. Zanzi
"Chameleonic dilaton, nonequivalent frames, and the cosmological constant problem in quantum string theory". Phys. Rev. D82 (2010) 044006.
- 4) A. Zanzi
"Chameleonic dilaton and conformal transformations."
arXiv. hep-th/1206.4463.
- 5) A. Zanzi
"Species, chameleonic strings and the concept of particle".
arXiv.hep-th/1206.4794.
- 6) A. Zanzi
"Dilaton stabilization and composite dark matter in the string frame of heterotic-M-theory". arXiv.hep-th/1210.4615.
- 7) A. Zanzi
"Chameleonic equivalence postulate and wave function collapse"
Electr. Journal Th. Ph. 12, No. 33 (2015) 1-28.
- 8) A. Zanzi, B. Ricci
"Chameleon fields and solar physics"
Mod. Phys. Lett. A30 (2015) 1550053

9) A. Zanzi

"Chameleon fields, wave function collapse and quantum gravity"
J.Phys.Conf.Ser. 626 (2015) 1, 012041

10) A. Zanzi

"Chameleonic theories: a short review"

Invited review – *Universe* **2015**, 1(3), 446-475.

Special Issue: *Modified Gravity Cosmology: From Inflation to Dark Energy*



Il sottoscritto acconsente, ai sensi del D. Lgs. 30/06/2003 n. 196, al trattamento dei propri dati personali e alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara.

Ferrara, 11/05/2016

