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Born: Feb 24th 1968 in Teramo, Italy

## **EDUCATION**

Ph.D. in Physics, University of L'Aquila (Italy), 1999  
Laurea in Physics with full honors, University of Perugia (Italy), 1992

## **RESEARCH INTERESTS**

Solar Neutrinos  
Neutrinos from Supernovae  
Geo-neutrinos  
Dark Matter  
Neutrinoless double beta decay  
Development of a Nd-loaded liquid scintillator  
Development of a boron-loaded liquid scintillator  
Search for Sterile neutrinos with artificial neutrino sources

## **EMPLOYMENT HISTORY**

Senior Staff Researcher, Gran Sasso Laboratory, Dec 2008  
Staff Researcher, Gran Sasso Laboratory, Dec 2001  
Research Associate, University of Milano, Jun 2001 – Dec 2001  
Research Associate/Lecturer, Princeton University, Feb 1999 – May 2001

## **TEACHING**

Fall 2007, Phys. Dept. Princeton University, PHY103(Mechanics)  
PhD course on Neutrino Physics, Phys. Dept, University of Milano, 2005-2007  
Fall 2000, Phys. Dept. Princeton University, PHY101(Mechanics)  
Princeton-LNGS Summer School, editions 2004-2010, Special Relativity and Modern Physics

## **ORGANIZATION OF EVENTS**

*Workshop of three family neutrino oscillations*, Gran Sasso Laboratory, May 2011.  
<http://beyond3nu.lngs.infn.it/>

*Neutrino geoscience 2010*, Gran Sasso Laboratory, Oct. 2010.  
<http://geoscience.lngs.infn.it/>

*The physics of the sun and solar neutrinos II*, Gran Sasso Laboratory, Oct. 2010.  
<http://physun2010.mi.infn.it/>

*Weak interactions and neutrinos*, Perugia, Sept. 2009. <http://win09.lngs.infn.it/>  
*The physics of the sun and solar neutrinos I*, Gran Sasso Laboratory, Oct. 2008.  
<http://www.mi.infn.it/PHYSEN/>

## **SELECTED INVITED TALKS**

*"Search for sterile neutrinos with sources in Borexino"*, Phys. Dept. Princeton University, Princeton, May 2011.

*"Supernova neutrino detection with liquid scintillators"*, Workshop on neutrino from Supernovae, Paris, Dec. 2010.

*"Neutrino physics with Borexino"*, International School in Nuclear Physics, Particle and Astrophysics, Erice, Sept. 2010.

*"Geoneutrinos"*, Neutrino Oscillations Workshops, Otranto, Spet. 2010.

*"Measurements of electron anti-neutrinos with Borexino"*, Phys. Dept. University of Maryland, College Park, MD, Aug. 2010.

*"Neutrino mixing and oscillations. Neutrino phenomenology"*, ISAPP School, Saragoza, Jul. 2010.

*"Understanding the sun: Borexino"*, Nuclear Physics and Astrophysics, Frascati, Jun 2009.

*"Detection of neutrinos from a core collapse supernova"*, XLVII International Winter Meeting on Nuclear Physics, Bormio, Jan 2009

*"Detection of supernova neutrinos"*, ILIAS WP2 Meeting, Pisa, Nov 2008

*"Observation of neutrinos from natural sources"*, IFAE , Bologna, 2008

*"Understanding the sun through neutrinos"*, 5th Italian-Sino Workshop on relativistic astrophysics, Taipei, May 2008.

*"Understanding the Sun: Borexino"*, Nuclear Physics in Astrophysics IV, LNF Frascati, Jun 8-12, 2009.

*"Nuclear Physics for geoneutrinos"*, Workshop towards neutrino technologies, ICTP Trieste, July 13-17, 2009.

*"Neutrino mixing and oscillations. Neutrino phenomenology"*, ISAPP, Zaragoza July 13-22, 2010

*"Neutrino Physics with Borexino"*, International School of Nuclear Physics 32º Course, Particle and Nuclear Astrophysics, Erice, Sept 16-24, 2010

*"Geo-neutrinos"*, NOW, Sept 4-11, 2010

*"Supernova Neutrino Detection with Liquid Scintillators"*, Workshop on neutrinos from supernovae, Paris, Dec. 14-17, 2010

## SELECTED PUBLICATIONS

- G. Bellini, A. Ianni and F. Mantovani, “*Looking into the Earth’s interior with geo-neutrinos*”, **CERN Cour.51N3:April,2011**.
- Borexino collaboration, “*Absence of day-night asymmetry of 862 keB 7Be solar neutrinos in Borexino and MSW oscillation parameters*”, **arXiv:1104.2150 [hep-ex]**
- F. Villante, A. Ianni, F. Lombardi, G. Pagliaroli and F. Vissani, “*A Step toward CNO solar neutrinos detection in liquid scintillators*”, **arXiv:1104.1335 [hep-ph]**
- A. Ianni, “*Neutrino physics with Borexino*”, **Prog.Part.Nucl.Phys.** **66** (2011) **405-411**
- Borexino collaboration, “*Muon and cosmogenic neutron detection in Borexino*”, **JINST 6:P05005,2011**
- Borexino collaboration, “*Study of solar and other unknown anti-neutrino fluxes with Borexino at LNGS*”, **Phys.Lett.B696:191-196,2011**
- Borexino collaboration, “*Observation of geo-neutrinos*”, **Phys. Lett. B687(2010) 299-304**.
- G. Bellini and A. Ianni, “*Borexino homes in on neutrino oscillations*”, **CERN Cour.49N5:13-15,2009**.
- Borexino collaboration, “*Direct measurement of the 7Be solar neutrino flux with 192 days of Borexino data*”, **Phys. Rev. Lett.** **101**, **091302**
- Borexino collaboration, “*First real time detection of 7Be solar neutrinos by Borexino*”, **Phys. Lett. B 658 (2008) 101-108**
- Borexino collaboration, “*The Borexino detector at Laboratori Nazionali del Gran Sasso*”, **NIM A 600 (2009) 568-593**.
- Ianni, D. Montanino e F. Villante, *How to observe  $^8B$  solar neutrinos in liquid scintillator detectors*, **Phys. Lett. B627 (2005) 38**
- G. Galbiati, A. Pocar, D. Franco, A. Ianni, L. Cadonati e S. Schoenert, *Cosmogenic  $^{11}C$  production and sensitivity of organic scintillator detectors to pep and CNO neutrinos*, **Phys. Rev. C71 (2005) 055805**.
- M.L. Costantini, A. Ianni e F. Vissani, *SN1987A and the properties of the neutrino burst*, **Phys. Rev. D70 (2004) 043006**.
- A. Ianni, *Maximum likelihood analysis of the first KamLAND*, **J. Phys. G29 (2003) 2107**.
- A. Ianni, D. Montanino e G. Scioscia, *Test of non-standard properties with the Borexino source experiments*, **Astrop. Phys. 10 (1999), 331**.