

## Curriculum Vitae di Silvia Cappelli

- Il 31.7.1981 consegue il Diploma di Ragioniere e Perito Commerciale con la votazione di 60/60

### Attività professionale

- Dal 9.3.82 al 6.6.82 presta servizio presso l'I.N.F.N. Sezione di Firenze come Assistente Amministrativo con un contratto di lavoro a tempo determinato ai sensi dell'art.6 della legge 70/75.
- Il 16.11.82 viene assunta presso l'I.N.F.N. Sezione di Firenze come Assistente Amministrativo quale vincitrice del concorso n.312/82.
- Dal 16.11.82 al 31.3.92 svolge la propria attività nell'ambito del Servizio Amministrativo della Sezione di Firenze occupandosi di tutti i settori di tale servizio e assumendo l'incarico di Cassiera per i trienni 1987/89 e 1990/92.
- Dall'1.4.92 al 15.5.2001 svolge la propria attività per la Segreteria Scientifica istituita presso la sezione di Firenze dell'I.N.F.N. occupandosi di organizzazione convegni, pagine web della sezione e supporto alla Biblioteca di Fisica.
- Dal Febbraio 1998 al Dicembre 2002 è stata Responsabile del Servizio di Direzione della Sezione INFN di Firenze.
- Dal 15.5.2001 è Responsabile del Servizio di Amministrazione della Sezione INFN di Firenze e coordina quattro collaboratori.
- Dal 1.8.2018 è Responsabile anche dell'Amministrazione della struttura INFN Centro Nazionale Studi Avanzati Galileo Galilei Institute.
- E' Financial Officer dei progetti finanziati con fondi esterni: SIDDARTA\_PNRA16\_00252, H2020 GA 823914-ARIADNEPLUS, H2020 GA 804815-MEGANTE, H2020 GA 824096-RADIATE, PON PER-ACTRIS-IT PIR01\_00015, CRF-CALZOLAI, CRF-CIVININI, INFN PCT - Bando POR FSE 2014 – 2020 progetto MIMA-SITES, PRIN REDI - 2017FNJFMW, PRIN CAPPELLI - 2017E44HRF
- Ha fatto parte delle commissioni esaminatrici nei concorsi PI/C7/295, PI/C7/568, PI/C7/679, FI/C7/20332, FI/C7/20332 e presidente nella commissione per la selezione 19471/2017.

Sesto Fiorentino, 12.1.2022

## **Curriculum Vitae In forma breve di**

**Luisa Iacono**

### **Informazioni Personali**

**Inquadramento :** Funzionario di Amministrazione IV livello INFN- tempo indeterminato - sez. INFN Padova –

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**Titolo di studio:** Laurea in Governo delle Amministrazioni (classe 19 delle lauree in scienze dell'amministrazione - ex DM509/99) conseguita presso l'Università di Padova

### **Esperienze Professionali**

Dal 1 ottobre 2007 ad oggi Responsabile del Servizio Amministrazione INFN della Sezione di Padova.

Il Servizio si occupa di contratti, pagamenti, gestione missioni, gestione ospiti, inventario, gestione del personale e della gestione dei fondi esterni.

Coordino l'attività degli altri 7 componenti del Servizio.

Mi occupo direttamente del settore contabilità :

- richieste di preventivi per funzionamento e attrezzature sezione, assestamento di bilancio (richieste di storni e di entrate straordinarie) e richieste di riassegnazione avanzo;
- redazione delle rendicontazioni
- elaborazione dati per situazioni periodiche e/ o statistiche da trasmettere ai ministeri e altri Enti interessati.
- predisposizione delle procedure amministrativo-contabili per la gestione dei fondi provenienti dall'Unione Europea e agli altri Enti finanziatori. Ho seguito, tra gli altri, per l'attività di competenza la rendicontazione di circa 30 progetti finanziati da UE in alcuni dei quali INFN ha avuto il ruolo di Coordinatore Europeo.

Sono stata componente di Gruppi di lavoro INFN per Contabilità, Acquisti, semplificazione amministrativi-contabile. Componente di commissioni di concorso INFN per selezione di personale

Padova 13 gennaio 2022

## **Prof. Fabio Mantovani**

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University of Ferrara  
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<https://www.fe.infn.it/radioactivity/>

### **RÉSUMÉ**

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Fabio Mantovani graduated in Physics at the University of Ferrara in 2002 and since then he began working on geoneutrinos and gamma-ray spectroscopy, topics of great interest which exhibit currently strong interconnections among physical, geological and environmental disciplines. During his graduate studies in Earth science at the University of Siena he carried out research activities in these scientific areas. The main outcomes of these studies have been collected in a PhD thesis dedicated to the investigation of the potential of geoneutrinos as a probe for exploring the Earth.

After starting in 2008 his activity as a research fellow at the University of Ferrara, Fabio Mantovani published global models for the prediction of geoneutrino signal expected at the KamLAND, Borexino, SNO+ and JUNO experiments. These studies immediately became references at international level. After more than 60 scientific papers published together with Earth scientists and particle physicists, he is firmly convinced of the exceptional potentialities arising from the interplay of skills transcending conventional academic boundaries. He participated in many scientific committees of international congresses, and organized and supported dedicated sessions, summer institutes and summer schools.

Concurrently, Fabio Mantovani gained a strong expertise in management as he founded in 2006 the *Laboratory of Applied Geophysics* at the Center for GeoTechnology (University of Siena) and in 2010 the *Laboratory for Nuclear Technologies Applied to the Environment* at the Department of Physics and Earth Sciences (University of Ferrara).

Fabio Mantovani believes that the success of an idea strongly depends on the efficiency with which the scientific, technological and economic activities interplay with each other. Supported by international collaborations and winning grants, he contributed to consolidate a team of young researchers which realized successful projects in airborne gamma-ray spectroscopy, radioactivity mapping and nuclear technologies for nuclear wastes, NORMs (Naturally Occurring Radioactive Materials) and agriculture 4.0. His curiosity led him to explore new fields in which nuclear physics can be applied, inventing a patent, contributing to map the natural radioactivity of several Italian regions and developing new Unmanned Aerial Vehicle (UAV) for radioactivity monitoring. Recently his efforts are focused on bridging the gap between academic research and industrial commercialization together with many private companies.

Since “if you want to master something, teach it”, Fabio Mantovani has always carried out an intensive teaching activity with courses at the University of Siena and University of Ferrara, on arguments of Astrophysics, of Terrestrial Physics and of General physics. He was advisor/co-advisor of 16 Bachelor Theses, 13 Master Theses and 11 PhD Theses. He also had several outreach and dissemination initiatives.

As an INFN (National Institute for Nuclear Physics) associate researcher, he is the coordinator of the Ferrara section of the JUNO experiment since 2015 and member of Scientific National Committee II since 2017.

From February 2017 to February 2018 he was member of Academic Senate of the University of Ferrara.

From February 2018 Fabio Mantovani is presently associate professor of Physics of the Earth and of the circumterrestrial medium (FIS/06) at the University of Ferrara.

In September 2019 he obtained the Italian national scientific habilitation for full professor.

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## ACADEMIC CAREER

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*September 2019*

Italian National Scientific Habilitation – Full professor in Astronomy, Astrophysics, Physics of the Earth and the Planets (02/C1)

*February 2018*

Associate professor in Physics of the Earth and of the circumterrestrial medium (FIS/06) – Department of Physics and Earth Sciences – University of Ferrara

*November 2008*

Assistant professor in Nuclear and Subnuclear Astrophysics (FIS/04) – Department of Physics and Earth Sciences – University of Ferrara

*November 2006*

Two-year post-doc position at Center for GeoTechnology - University of Siena

*October 2006*

PhD in Earth Science – University of Siena

Thesis: *Geo-neutrinos: a new probe of Earth's interior*

*October 2002*

Four-year doctoral fellowship – University of Siena

*November 2001*

Master's degree in physics - University of Ferrara

Thesis: *Cosmic microwave radiation and the determination of cosmological observables*

## PRESENT INSTITUTIONAL SERVICES

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*From 2018* member of Scientific Committee of [Tecnopolo Terra&AcquaTech](#)

*From 2017* member of [National Scientific Committee II](#) (Astroparticle physics experiments) - National Institute for Nuclear Physics (INFN)

*From 2015* member of the Steering Committee of [International School on AstroParticle Physics](#) (ISAPP) - European Doctorate School

*From 2014* local coordinator of JUNO experiment (Jiangmen Underground Neutrino Observatory - China) at INFN Ferrara section

*From 2014* member of the academic board for the PhD in Physics of University of Ferrara

*From 2009* head of the [Laboratory for nuclear technologies applied to the environment](#) of University of Ferrara

## ENDED INSTITUTIONAL SERVICES

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*2019:* member of the PhD examining committee in Earth Science, University of Maryland

*2017 - 2018:* member of Academic Senate, University of Ferrara

*2016 - 2017:* member of University Research Council, University of Ferrara

*2013- 2017:* member of COST Action TU1301 - [NORM for Building materials](#) (NORM4BUILDING)

*2016:* member of the PhD admission committee in Physics (XXXII cycle), University of Ferrara

*2016:* member of the PhD admission committee in Earth Science, University of Maryland

*2014:* member of the PhD admission committee in Physics (XXX cycle), University of Ferrara

*2013:* member of the PhD Thesis Committee, PhD in Earth Science, Université Joseph Fourier of Grenoble

*2013:* member of the PhD admission committee in Physics (XXIX cycle), University of Ferrara

*2007 - 2009:* head of the Laboratory for applied geophysics at Center for GeoTechnology, University of Siena

## PRINCIPAL INVESTIGATOR OF RESEARCH PROJECTS

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Period	Acronim	Title of the project	Funding agency
2020 2023	RADHAWK	Gamma-ray spectrometry systems for UAV	DroneLab S.r.l.
2020 2023	LIGHTHOUSE3D	New online 3D imaging technologies for geophysical surveys	Lighthouse S.p.A.
2020 2022	TOMMY	Gamma and x spectroscopy applied to study agricultural soils	Bi-Rex Consortium
2012 2020	ITALRAD	Mapping the natural radioactivity of the Italian territory with gamma-ray spectroscopy surveys.	MIUR – Premium project
2015 2019	UMBRIA RAD	Mapping the effective dose rate of the population living in Umbria due to terrestrial and cosmic radiations	Umbria Region
2015 2019	ATTIVAMENTE	Going to the school together with radioactivity	CARIPARO Foundation

## CO-INVESTIGATOR OF RESEARCH PROJECTS

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Period	Acronim	Title of the project	Funding agency
2019 2021	POSITIVE	Scalable Operating Protocols for precision agriculture	Emilia Romagna Region - POR-FESR
2016 2018	ALADIN	Smart Hydro Agri-food	Emilia Romagna Region - POR-FESR
2009 2013	RAD MONITOR	Distribution of natural radioelements across the Veneto Region using airborne gamma-ray spectrometry	CARIPARO Foundation
2008 2010	RADNAT	Potential content of natural radioactivity of the Region of Tuscany territory	Tuscany Region - CIPE

## SCIENTIFIC CONSULTANT

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Period	Acronim	Title of the project	Funding agency
2020 2021	RAD DRONE	Airborne gamma ray spectroscopy on board of aircraft and drones	Italian Aerospace Research Centre - CIRA
2020 2021	SPOILER	Gamma spectrometer for the on-site characterization of unconventional medical radioactive waste	Emilia Romagna Region - POR-FESR
2019 2020	RAD GRANITE	Studying petrofacies of granitic bodies using gamma-ray logs	ENEL Green Power
2018 2020	CORSAIR	Cloud Oriented Radiation Sensor for Advanced Investigation of Rocks	Tuscany Region - POR-FESR

## PATENTS

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No. RM2012A000180 26 April 2012

Property: University of Ferrara, University of Siena and Carlos Rossi Alvarez

Inventors: Fabio Mantovani, Gerti Xhixha, Tommaso Colonna, Carlos Rossi Alvarez

Title: "[Dispositivo attivo MCA stand-alone per la digitalizzazione di segnali di spettroscopia gamma outdoor](#)"

Ns. Rif.: BREV/ bc/A1722

## MEMBER OF SCIENTIFIC COMMITTEES

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2019 - [Neutrino Geoscience 2019 Conference](#) - Prague - 21-23 October - Czech Republic  
2015 - now - [International School on AstroParticle Physic](#) - ISAPP - European Doctorate School  
2015 - 2018 - [Summer School in Nuclear Physics and Technologies](#) - University of Ferrara and the College of Engineering of the University of Texas at Austin  
2018 - [Summer Institute \(ISAPP\): using particle physics to understand and image the Earth](#) (II ed.) - Ferrara - 2-12 July - Italy  
2016 - [Summer Institute \(ISAPP\): using particle physics to understand and image the Earth](#) (I ed.) - Gran Sasso Science Institute - 11-21 July - Italy  
2015 - [Neutrino Geoscience 2015 Conference](#) - Paris - 15-17 June - France  
2015 - [International Workshop on KamLAND Geoscience](#) - Tokyo - 15-16 January - Japan  
2013 - Convener of the session - [Geoneutrino: the nexus of particle physics and Earth science](#) - Goldschmidt 2013 - Florence - 27 August - Italy  
2013 - [Neutrino Geoscience 2013 Conference](#) - Takayama - 23-23 March - Japan  
2010 - [Neutrino Geoscience 2010 Conference](#) - Gran Sasso Laboratory - 6-8 October - Italy

## REFEREE FOR SCIENTIFIC JOURNALS

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Annals of Geophysics ([Ann Geophys Italy](#))  
Applied Radiation and Isotopes ([Appl. Radiat. Isot.](#))  
Arabian Journal of Geosciences ([Arab J Geosci Journal](#))  
Computers & Geosciences ([Comput Geosci](#))  
Earth and Planetary Science Letter ([EPSL](#))  
Environmental Earth Sciences ([Environ. Earth Sci.](#))  
European Journal of Mineralogy ([Eur. J. Mineral.](#))  
Geosciences ([Geosciences](#))  
Journal of African Earth Sciences ([J Afr Earth Sci](#))  
Journal of Environmental Radioactivity ([JER](#))  
Journal of Geodynamics ([J Geodyn](#))  
Journal of Instrumentation ([JINST](#))  
Journal of Radiological Protection ([JRPR](#))  
Physical Review D ([PRD](#))  
Progress in Particle and Nuclear Physics ([Prog. Part. Nucl. Phys.](#))  
Remote Sensing ([Remote Sens.](#))  
Reviews of Geophysics ([Rev. Geophys.](#))

**2021**

Marini, M., S. Panicacci, M. Donati, L. Fanucci, E. Fanchini, A. Peperosa, M. Morichi, M. Albéri, E. Chiarelli, M. Montuschi, K.G.C. Raptis, A. Serafini, V. Strati, F. Mantovani. *An Easily Integrable Industrial System for Gamma Spectroscopic Analysis and Traceability of Stones and Building Materials*. Sensors, 21, 352 (2021). DOI 10.3390/s21020352 ([pdf](#)).

Abusleme, A., et al. [JUNO Collaboration]. *Feasibility and physics potential of detecting 8B solar neutrinos at JUNO*. Chinese Physics C 45(2) (2021). DOI 10.1088/1674-1137 ([pdf](#)).

Abusleme, A., et al. [JUNO Collaboration]. *Optimization of the JUNO liquid scintillator composition using a Daya Bay antineutrino detector*. Nuclear Instruments and Methods in Physics Research Section A, 988, 164823 (2021). DOI 10.1016/j.nima.2020.164823 ([pdf](#)).

Bellato M., A. Bergnoli, A. Brugnera, S. Chen, Z. Chen, B. Clerbaux, F. dal Corso, D. Corti, J. Dong, G. Galet, A. Garfagnini, A. Giaz, G. Gong, C. Grewing, J. Hu, R. Isocrate, X. Jiang, F. Li, F. Li, I. Lippi, F. Marini, Z. Ning, A. Olshevskiy, D. Pedretti, P.A. Petitjean, M. Robens, V. Shutov, A. Stahl, J. Steinmann, Y. Sun, S. van Waasen, Y. Wang, Z. Wang, W. Wei, X. Yan, Y. Yang, A. Aiello, A. Andronico, V. Antonelli, W. Bandini, A. Brigatti, A. Barresi, A. Budano, R. Bruno, A. Cabrera, A. Cammi, R. Caruso, D. Chiesa, C. Clementi, S. Costa, X. Ding, S. Dusini, A. Fabbri, M. Fargetta, G. Fiorentini, R. Ford, A. Formozov, M. Giammarchi, M. Grassi, C. Landini, P. Lombardi, C. Lombardo, Y. Malyshev, F. Mantovani, S.M. Mari, C. Martellini, A. Martini, E. Meroni, M. Mezzetto, L. Miramonti, P. Montini, M. Montuschi, M. Nastasi, F. Ortica, A. Paoloni, S. Parmeggiano, N. Pelliccia, E. Previtali, G. Ranucci, D. Riondino, A.C. Re, B. Ricci, A. Romani, P. Saggese, G. Salamanna, F.H. Sawy, A. Serafini, G. Settanta, C. Sirignano, M. Sisti, L. Stanco, V. Strati, C. Tuvé, G. Verde, L. Votano, J. Zhang. *Embedded readout electronics R&D for the large PMTs in the JUNO experiment*. Nuclear Instruments and Methods in Physics Research Section A, 985, 164600 (2021). DOI 10.1016/j.nima.2020.164600 ([pdf](#)),

**2020**

Bottardi C., M. Albéri, M. Baldoncini, E. Chiarelli, M. Montuschi, K.G.C. Raptis, A. Serafini, V. Strati, F. Mantovani. *Rain rate and radon daughters' activity*. Atmospheric Environment, 238, 117728 (2020). DOI 10.1016/j.atmosenv.2020.117728 ([pdf](#)).

Agostini, M., et al. [Borexino Collaboration]. *Comprehensive geoneutrino analysis with Borexino*. Physical Review D 101(1), 012009 (2020). DOI 10.1103/PhysRevD.101.012009 ([pdf](#)).

Filippucci, P., A. Tarpanelli, C. Massari, A. Serafini, V. Strati, M. Alberi, K. G. C. Raptis, F. Mantovani, L. Brocca. *Soil moisture as a potential variable for tracking and quantifying irrigation: a case study with proximal gamma-ray spectroscopy data*. Advances in Water Resources, 136, 103502 (2020). DOI 10.1016/j.advwatres.2019.103502 ([pdf](#)).

Fabbri, B., M. Valt, C. Parretta, S. Gherardi, A. Gaiardo, C. Malagù, F. Mantovani, V. Strati, V. Guidi. *Correlation of gaseous emissions to water stress in tomato and maize crops: From field to laboratory and back*. Sensors and Actuators B: Chemical, 303, 127227 (2020). DOI 10.1016/j.snb.2019.127227 ([pdf](#)).

**2019**

Pedretti, D., Bellato, M., Isocrate, R., Bergnoli, A., Brugnera, R., Corti, D., Corso, F. D., Galet, G., Garfagnini, A., Giaz, A., Lippi, I., Marini, F., Andronico, G., Antonelli, V., Baldoncini, M., Bernieri, E., Brigatti, A., Budano, A., Buscemi, M., Bussino, S., Caruso, R., Chiesa, D., Clementi, C., Ding, X. F., Dusini, S., Fabbri, A., Ford, R., Formozov, A., Giammarchi, M., Grassi, M., Insolia, A., Lombardi, P., Mantovani, F., Mari, S. M., Martellini, C., Martini, A., Meroni, E., Miramonti, L., Monforte, S., Montini, P., Montuschi, M., Nastasi, M., Ortica, F., Paoloni, A., Previtali, E., Ranucci, G., Re, A. C., Ricci, B., Romani, A., Salamanna, G., Sawy, F. H., Settanta, G., Sisti, M., Sirignano, C., Stanco, L., Strati, V., Verde, G. *Nanoseconds Timing System Based on IEEE 1588 FPGA Implementation*. IEEE Transactions on Nuclear Science 2019, 66, (7), 1151-1158 (2019). DOI 10.1109/TNS.2019.2906045 ([pdf](#)).

Reguzzoni, M., L. Rossi, M. Baldoncini, I. Callegari, P. Poli, D. Sampietro, V. Strati, F. Mantovani, G. Andronico, V. Antonelli, M. Bellato, E. Bernieri, A. Brigatti, R. Brugnera, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, D. Corti, F. Dal Corso, X. F. Ding, S. Dusini, A. Fabbri, G. Fiorentini, R. Ford, A. Formozov, G. Galet, A. Garfagnini, M. Giammarchi, A. Giaz, M. Grassi, A. Insolia, R. Isocrate, I. Lippi, F. Longhitano, D. Lo Presti, P. Lombardi, Y. Malyshev, F. Marini, S. M. Mari, C. Martellini, E. Meroni, M. Mezzetto, L. Miramonti, S. Monforte, M. Montuschi, M. Nastasi, F. Ortica, A. Paoloni, S. Parmeggiano, D. Pedretti, N. Pelliccia, R. Pompilio, E. Previtali, G. Ranucci, A. C. Re, B. Ricci, A. Romani, P. Saggese, G. Salamanna, F. H. Sawy, G. Settanta, M. Sisti, C. Sirignano, M. Spinetti, L. Stanco, G. Verde and L. Votano. *GIGJ: a crustal*



gravity model of the Guangdong Province for predicting the geoneutrino signal at the JUNO experiment. *Journal of Geophysical Research: Solid Earth*, 2169, 9313-9342 (2019). DOI 10.1029/2018JB016681 ([pdf](#)).

Albéri, M., M. Baldoncini, C. Bottardi, E. Chiarelli, S. Landsberger, K. Raptis, A. Serafini, V. Strati and F. Mantovani. *Training future engineers to be ghostbusters: hunting for the spectral environmental radioactivity*. *Education Sciences*, 9, 15 (2019). DOI 10.3390/educsci9010015 ([pdf](#)).

Lombardi, P., M. Montuschi, A. Formozov, A. Brigatti, S. Parmeggiano, R. Pompilio, W. Depnering, S. Franke, R. Gaigher, J. Joutsenvaara, A. Mengucci, E. Meroni, H. Steiger, F. Mantovani, G. Ranucci, G. Andronico, V. Antonelli, M. Baldoncini, M. Bellato, E. Bernier, R. Brugnera, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, C. Clementi, D. Corti, F. Dal Corso, X. F. Ding, S. Dusini, A. Fabbri, G. Fiorentini, R. Ford, G. Galet, A. Garfagnini, M. Giammarchi, A. Giaz, M. Grassi, A. Insolia, R. Isocrate, I. Lippi, Y. Malyshev, S. M. Mari, F. Marini, C. Martellini, A. Martini, M. Mezzetto, L. Miramonti, S. Monforte, P. Montini, M. Nastasi, F. Ortica, A. Paoloni, D. Pedretti, N. Pelliccia, E. Previtali, A. C. Re, B. Ricci, D. Riondino, A. Romani, P. Saggese, G. Salamanna, F. H. Sawy, G. Settanta, M. Sisti, C. Sirignano, L. Stanco, V. Strati, G. Verde and L. Votano. *Distillation and stripping pilot plants for the JUNO neutrino detector: Design, operations and reliability*. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 925, 6-17 (2019). DOI 10.1016/j.nima.2019.01.071 ([pdf](#)).

Baldoncini, M., M. Albéri, C. Bottardi, E. Chiarelli, K. G. C. Raptis, V. Strati, and F. Mantovani. *Biomass water content effect on soil moisture assessment via proximal gamma-ray spectroscopy*. *Geoderma*, 335, 69-77 (2019). DOI 10.1016/j.geoderma.2018.08.012 ([pdf](#)).

## 2018

Baldoncini, M., M. Albéri, C. Bottardi, E. Chiarelli, K. G. C. Raptis, V. Strati, and F. Mantovani. *Investigating the potentialities of Monte Carlo simulation for assessing soil water content via proximal gamma-ray spectroscopy*. *Journal of Environmental Radioactivity*, 192, 105-116 (2018). DOI 10.1016/j.jenvrad.2018.06.001 ([pdf](#)).

Strati, V., Albéri M., Anconelli S., Baldoncini M., Bittelli M., Bottardi C., Chiarelli E., Fabbri B., Guidi V., Raptis K.G.C., Solimando D., Tomei F., Villani G. and Mantovani F. *Modelling Soil Water Content in a Tomato Field: Proximal Gamma Ray Spectroscopy and Soil-Crop System Models*. *Agriculture*, 8(4), 60 (2018). DOI 10.3390/agriculture8040060 ([pdf](#)).

Grassi, M., M. Montuschi, M. Baldoncini, F. Mantovani, B. Ricci, G. Andronico, V. Antonelli, M. Bellato, E. Bernieri, A. Brigatti, R. Brugnera, A. Budano, M. Buscemi, S. Bussino, R. Caruso, D. Chiesa, D. Corti, F. D. Corso, X. F. Ding, S. Dusini, A. Fabbri, G. Fiorentini, R. Ford, A. Formozov, G. Galet, A. Garfagnini, M. Giammarchi, A. Giaz, A. Insolia, R. Isocrate, I. Lippi, F. Longhitano, D. L. Presti, P. Lombardi, F. Marini, S. M. Mari, C. Martellini, E. Meroni, M. Mezzetto, L. Miramonti, S. Monforte, M. Nastasi, F. Ortica, A. Paoloni, S. Parmeggiano, D. Pedretti, N. Pelliccia, R. Pompilio, E. Previtali, G. Ranucci, A. C. Re, A. Romani, P. Saggese, G. Salamanna, F. H. Sawy, G. Settanta, M. Sisti, C. Sirignano, M. Spinetti, L. Stanco, V. Strati, G. Verde and L. Votano *Charge reconstruction in large-area photomultipliers*. *Journal of Instrumentation*, 13, P02008-P02008 (2018). DOI 10.1088/1748-0221/13/02/P02008 ([pdf](#)).

Baldoncini, M., M. Albéri, C. Bottardi, B. Minty, K. G. Raptis, V. Strati and F. Mantovani. *Airborne gamma-ray spectroscopy for modeling cosmic radiation and effective dose in the lower atmosphere*. *IEEE Transactions on Geoscience and Remote Sensing*, 56, 823-834 (2018). DOI 10.1109/TGRS.2017.2755466 ([pdf](#)).

## 2017

Strati V., Wipperfurth S.A., Baldoncini M., McDonough W.F., Mantovani F. *Perceiving the crust in 3D: a model integrating geological, geochemical, and geophysical data*. *Geochemistry, Geophysics, Geosystems*, 18, 4326-4341 (2017). DOI 10.1002/2017GC007067 ([pdf](#)).

Baldoncini M., Albéri M., Bottardi C., Raptis K.G.C., Minty B., Strati V. and F. Mantovani. *Exploring atmospheric radon with airborne gamma-ray spectroscopy*. *Atmospheric Environment*, 170, 259-268 (2017). DOI 10.1016/j.atmosenv.2017.09.048 ([pdf](#)).

Albéri M., Baldoncini M., Bottardi C., Chiarelli E., Fiorentini G., Raptis K.G.C., Realini E., Reguzzoni M., Rossi L., Sampietro D., Strati V., Mantovani F. *Accuracy of flight altitude measured with cheap GNSS, radar and barometer sensors: implications on airborne radiometric surveys*. *Sensors*, 17(8), 1889 (2017). DOI 10.3390/s17081889 ([pdf](#)).

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## 2016

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Mantovani F. *Un universo di colori. Idee didattiche alla scoperta dei misteri dell'Universo attraverso la spettroscopia*. Giornale di Astronomia, Vol. 27, N. 2, p. 16 - 23, ISSN 0339-1106, (2001) ([pdf](#))

## SPEAKER AT SCIENTIFIC CONGRESSES AND SUMMER SCHOOL

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29/07/2020

*Improved geoneutrino results from Borexino*  
[International Conference on High Energy Physics](#) (virtual)

26-28 June 2018

*Geoneutrinos for unveiling the Earth's interior*  
[3rd European Mantle Workshop](#) - Pavia - Italy

7-8 January 2016

*Last and next decade in geoneutrino measurements*  
[1<sup>st</sup> International workshop for neutrino oscillation tomography](#) - Earthquake Research Institute - University of Tokyo

30-31 October 2015

*Geo-neutrinos as a probe of Earth's interior*  
[Workshop on Space Particles and Earth](#) - University of Évora - Portugal

15-16 January 2015

[International Workshop on KamLAND Geoscience](#) - Tokyo (Japan)  
Title: *A Refined Reference Model for geoneutrinos at Borexino*

28 April - 2 May 2014

*A reference Earth model for geoneutrinos*  
[Japan Geoscience Union Meeting 2014](#) - Pacifico Yokohama (Japan)

21-23 March 2013

*Geo-neutrinos: combined KamLAND and Borexino analysis, and future*  
[Neutrino Geoscience 2013](#) - Takayama (Japan)

11-13 February 2013

*Half-life of  $^{214}\text{Po}$  and  $^{212}\text{Po}$  measured with CTF at LNGS*  
[2nd International Conference on Po and radioactive Pb isotopes - INCO-PoPb-2013](#) - Mangalore (India)

11-13 April 2012

*Geoneutrinos: a new probe for exploring Earth's interior*  
[IFAE - Incontri di Physics delle Alte Energie](#) - Ferrara (Italy)

15-16 September 2011

*Geo-neutrinos: phenomenology and experimental prospects*  
[7<sup>th</sup> Applied Antineutrino Physics \(AAP\)](#) - Vienna (Austria)

5-9 September 2011

*Towards a refined reference Earth model for geo-neutrinos*  
[12<sup>th</sup> International Conference on Topics in Astroparticle and Underground Physics \(TAUP\)](#) - Munich (Germany)

21 June 2011

*Geoneutrinos: Global Crust Model and LNGS Study*  
[Center for Theoretical Underground Physics and Related Areas \(CETUP\)](#) - Dakota State University - South Dakota (US)

15 April 2011

*Monitoring the terrestrial radioactivity*  
[IV Scuola Nazionale "Rivelatori ed Elettronica per Physics delle Alte Energie, AstroPhysics, Applicazioni Spaziali e Physics Medica"](#) - INFN National Laboratories of Legnaro (Italy)

25 August 2010

*Geo-neutrinos: a new probe of Earth's interior*  
[International Neutrino Summer School \(2010\)](#) - Yokohama / Tokai, J-PARC (Japan)

2 July 2010

*Geo-neutrinos: a new probe of Earth's interior*  
[Exotic Nuclei And Nuclear/Particle Astrophysics \(III\): From Nuclei To Stars \(CSSP\)](#) - Sinaia (Romania)

19-21 October 2009

*Towards a Refined Reference Model for Geo-neutrinos*

[LowNu \(2009\) - Neutrino Champagne](#) - Reims (France)

17-19 September 2008

*Local Geology Relevant for Geoneutrinos at Gran Sasso*

[Neutrino Geoscience \(2008\)](#) - Sudbury (Canada)

11-15 September 2007

*A roadmap for geo-neutrinos: theory and experiment*

[International Conference on Topics in Astroparticle and Underground Physics \(TAUP\)](#) - Sendai (Japan)

14-16 December 2005

*Geo-neutrino reference model and uncertainties*

[Neutrino Geophysics](#) - Honolulu (Hawaii)

## **SEMINARS IN OUTREACH CONFERENCES**

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18 December 2020 (virtual)

*Nuclear Technologies for Agriculture 4.0*

Organizer: [Italian Aerospace Research Centre \(CIRA\)](#)

11 March 2017 - Belluno

*The radioactivity around us*

Organizer: [Dolomiti in Scienza \(2017\)](#) - "Gruppo Divulgazione Scientifica - E. Fermi - Belluno"

5 October 2016

*Nuclei for environment*

Organizer: [Comune di San Nicolò](#)

22 April 2016

*Chernobyl and wild boar: 30 years of history*

Organizer: [X Congresso Italiano di Teriologia - Associazione Teriologica Italiana](#)

12 March 2016

*Exploring the Earth with geoneutrinos*

Organizer: [Dolomiti in Scienza 2016 - Gruppo Divulgazione Scientifica Dolomiti E. Fermi](#)

12 March 2016

*Exploring the Earth with geoneutrinos*

Organizer: [Dolomiti in Scienza 2016 - Gruppo Divulgazione Scientifica Dolomiti E. Fermi](#)

22 April 2015

*Nuclei for environment*

Organizer: [Comune di Legnaro](#)

28 March 2014

*The radioactivity around us*

Organizer: [Comune di Codognè](#)

21 March 2014

*Exploring the Earth with geoneutrinos*

Organizer: [Museo Civico di Rovereto](#)

12 April 2013

*Exploring the Earth with geoneutrinos*

Organizer: [Venerdì dell'Universo](#) - University of Ferrara

25 March 2011 - Ravenna

*Nuclear energy and radioactivity: new challenges*

Organizer: [I pomeriggi della Scienza al Liceo Oriani](#) - Liceo Scientifico Oriani

3 March 2011 - Ferrara

*Natural radioactivity: from Marie Curie to geoneutrinos*

Organizer: [Corso di Eccellenza](#) at the Department of Physics of the University of Ferrara

26 February 2011 - Belluno

*Radioactivity: a fascinating physics phenomenon*

Organizer: [Dolomiti in Scienza \(2011\)](#) - Gruppo Divulgazione Scientifica - E. Fermi - Belluno

11 February 2011 - Massa

*Radioactivity: a fascinating physics phenomenon*

Organizer: [Massa Scienza](#) - Comune di Massa - Assessorato Turismo, Cultura, Pubblica Istruzione e Gemellaggi

10 December 2010 - Rovereto

*Investigating natural radioactivity with gamma spectroscopy*

Organizer: [VII Workshop in GeoPhysics](#) - Museo Civico di Rovereto

**TEACHING**

Academic year	Institution	Degree	Lectures	Credits	Hours
2020-2021	University of Ferrara	Master in Pharmacy	General physics	6	48
		Master in Physics	Nuclear and subnuclear geophysics	6	54
		Master in Physics	Environmental radioactivity	6	54
2019-2020	University of Ferrara	Master in Pharmacy	General physics	6	48
		Master in Physics	Frontiers of radiation monitoring in the environment	6	54
		Master in Physics	Nuclear and subnuclear astrophysics	6	54
2018-2019	University of Ferrara	Master in Pharmacy	General physics	6	48
		Master in Physics	Frontiers of radiation monitoring in the environment	6	54
		Master in Physics	Nuclear and subnuclear astrophysics	6	54
2017-2018	University of Ferrara	Master in Physics	Frontiers of radiation monitoring in the environment	6	48
		Bachelor in Geological Sciences	Physics II	6	48
		Bachelor in Information Technology	Physics II	6	48
2016-2017	University of Ferrara	Master in Physics	Nuclear and Subnuclear Astrophysics	6	42
		Bachelor in Geological Sciences	Physics II	6	48
		Bachelor in Information Technology	Physics II	6	48
2015-2016	University of Ferrara	Master in Physics	Nuclear and Subnuclear Astrophysics	6	42
		Bachelor in Geological Sciences	Physics II	6	48
		Bachelor in Information Technology	Physics II	6	48
2014-2015	University of Ferrara	Master in Physics	Nuclear and Subnuclear Astrophysics	6	42
		Bachelor in Geological Sciences	Physics II	6	48
2013-2014	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	48
2012-2013	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	60
2011-2012	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	60
	University of Siena	Master in Applied Geophysics	Physics Principles for Geology	4	36
2010-2011	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	60
2009-2010	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	60
2008-2009	University of Ferrara	Bachelor in Physics and Astrophysics	Elements of Astrophysics	6	48
		Bachelor in Geological Sciences	Physics II	6	60
	University of Siena	Bachelor in Geotechnologies	Geophysics	6	60
2007-2008	University of Siena	Master in Applied Geophysics	Applied Geophysics	6	60
		Bachelor in Geotechnologies	Fundaments of Mathematics	6	60
		Master in Geotechnologies for Archaeology	Methods and Geological Technologies	6	48

Academic year	Institution	Degree	Lectures	Credits	Hours
2006-2007	University of Siena	Master in Applied Geophysics	Applied Geophysics	3	24
		Bachelor in Geotechnologies	Fundaments of Mathematics	6	60
		Bachelor in Geotechnologies	Experimental Physics	6	60
		Master in Geotechnologies for Archaeology	Methods and Geological Technologies	6	48
2005-2006	University of Siena	Master in Applied Geophysics	Applied Geophysics	2	16
		Bachelor in Geotechnologies	Fundaments of Mathematics	6	60
		Bachelor in Geotechnologies	Experimental Physics	6	60
		Master in Geotechnologies for Archaeology	Methods and Geological Technologies	6	48
2004-2005	University of Siena	Bachelor in Geotechnologies	Fundaments of Mathematics	6	60
		Bachelor in Geotechnologies	Experimental Physics	6	60
2003-2004	University of Siena	Bachelor in Geotechnologies	Fundaments of Mathematics	6	60
		Bachelor in Geotechnologies	Experimental Physics	6	60
2002-2003	University of Siena	Bachelor in Geotechnologies	Fundaments of Mathematics	6	48
		Bachelor in Geotechnologies	Experimental Physics	6	48

## PHD THESIS SUPERVISOR OR ASSISTANT SUPERVISOR

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2019-2020 – PhD in Physics (XXXII cycle) – University of Ferrara  
[Exploring lower atmosphere and topsoil with gamma-ray spectroscopy](#)  
Student: Carlo Bottardi  
Supervisor: Fabio Mantovani

2017-2018 – PhD in Physics (XXX cycle) – University of Ferrara  
[Gamma radiation: a probe for exploring terrestrial environment](#)  
Student: Matteo Albèri  
Supervisor: Fabio Mantovani

2016-2017 – PhD in Physics (XXIX cycle) – University of Ferrara  
[The CLAS12 RICH readout electronics: design, development and test](#)  
Student: Matteo Turisini  
Supervisor: Fabio Mantovani

2016-2017 – PhD in Physics (XXIX cycle) – University of Ferrara  
[New challenges in the spectral reconstruction of terrestrial gamma rays and reactor antineutrinos](#)  
Student: Marica Baldoncini  
Supervisor: Fabio Mantovani

2015-2016 – PhD in Physics (XXVIII cycle) – University of Ferrara  
[Advanced modeling for studying antineutrinos and gamma rays coming from the Earth](#)  
Student: Virginia Strati  
Supervisor: Fabio Mantovani

2012-2013 – PhD in Natural Science (XXVI cycle) – University of Sassari  
[New gamma-ray spectrometry methods for estimating K, U, Th concentrations in rocks of the Sardinia Batholith](#)  
Student: Xhixha Kaçeli Merita  
Supervisor: Giacomo Oggiano  
Assistant supervisor: Fabio Mantovani

2011-2012 – PhD in Physics (XXV cycle) – University of Ferrara  
[A refined reference Earth model for the geo-neutrino studies at Borexino](#)  
Student: Viacheslav Chubakov  
Supervisor: Giovanni Fiorentini  
Assistant supervisor: Fabio Mantovani

2011-2012 – PhD in Physics (XXV cycle) – University of Ferrara  
[Calibration and performances of in-situ gamma ray spectrometer](#)  
Student: Manjola Shyti  
Supervisor: Giovanni Fiorentini  
Assistant supervisor: Fabio Mantovani

2010-2011 – PhD in Physics (XXIV cycle) – University of Ferrara  
[Advances  \$\gamma\$ -ray spectrometry for environmental radioactivity monitoring](#)  
Student: Gerti Xhixha  
Supervisor: Giovanni Fiorentini  
Assistant supervisor: Fabio Mantovani

2009-2010 – PhD in Environmental, geological and polar sciences and technologies (XXIII cycle) – University of Siena  
[Caratterizzazione del contenuto di radioattività naturale nelle rocce del complesso metamorfico delle Alpi Apuane](#)  
Student: Sara Mariani  
Supervisor: Riccardo Salvini  
Assistant supervisor: Fabio Mantovani

2007-2008 – PhD in Earth Science (XX cycle) – University of Siena  
[Caratterizzazione elettrica di depositi argillosi di origine glaciale, marina ed idrotermale attraverso indagini in situ ed in laboratorio](#)  
Student: Tommaso Colonna  
Supervisor: Luigi Carmignani  
Assistant supervisor: Fabio Mantovani



## **MASTER THESIS SUPERVISOR OR ASSISTANT SUPERVISOR**

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2017-2018 – Master's Degree in Physics (University of Ferrara)

[Geoneutrinos from Potassium in the Earth](#)

Student: Andrea Serafini

Supervisor: Fabio Mantovani

Assistant supervisor: Baldoncini Marica

Assistant supervisor: Strati Virginia

2017-2018 – Master's Degree in Physics (University of Ferrara)

[Study of the rain-induced gamma activity due to atmospheric radon daughters](#)

Student: Gerard Grande Bartumeu

Supervisor: Fabio Mantovani

Assistant supervisor: Carlo Bottardi

2014-2015 – Master's Degree in Physics (University of Ferrara)

[Time and charge response of linear alkylbenzene scintillators for JUNO experiment](#)

Student: Ivan Battaglia

Supervisor: Fabio Mantovani

Assistant supervisor: Barbara Ricci

Assistant supervisor: Paolo Lombardi

2012-2013 – Master's Degree in Physics (University of Ferrara)

[Performance validation of a lightweight collimated gamma-ray spectrometer for in situ survey](#)

Student: Carolina Robustini

Supervisor: Fabio Mantovani

Assistant supervisor: Xhixha Gerti

2012-2013 – Master's Degree in Physics (University of Ferrara)

[Validation of a Monte Carlo method for the calibration of an airborne gamma-ray detector](#)

Student: Marica Baldoncini

Supervisor: Fabio Mantovani

Assistant supervisor: Xhixha Gerti

2011-2012 – Master's Degree in Geological Sciences and Technologies (University of Siena)

[Analisi del contenuto di radioattività delle principali formazioni rocciose delle aree alpine, prealpine e collinari della Regione Veneto, finalizzata alla produzione di carte tematiche della distribuzione di radionuclidi naturali](#)

Student: Virginia Strati

Supervisor: Luigi Carmignani

Assistant supervisor: Fabio Mantovani

2009-2010 – Master's Degree in Physics (University of Ferrara)

[L'esplorazione del pianeta Terra attraverso i geo-neutrini](#)

Student: Golfarin Cristian

Supervisor: Fabio Mantovani

2008-2009 – Master's Degree in Applied Geology (Center for GeoTechnologies - University of Siena)

[La dispersione di onde superficiali: un approccio di analisi e processing dei dati](#)

Student: Piero Poli

Supervisor: Fabio Mantovani

Assistant supervisor: Tommaso Colonna

2008-2009 – Master's Degree in Applied Geology (Center for GeoTechnologies – University of Siena)

[L'impiego della spettroscopia ad impedenza per lo studio del contenuto idrico e di ghiaccio nei suoli: messa a punto di una strumentazione prototipale e di una metodologia d'acquisizione](#)

Student: Giulia Ricciardi

Supervisor: Fabio Mantovani

Assistant supervisor: Marco Bittelli

2008-2009 – Master's Degree in Applied Geology (Center for GeoTechnologies – University of Siena)

[L'importanza dei parametri geologici per l'ottimizzazione di sonde geotermiche applicate a pompe di calore: stime teoriche e casi di studio](#)

Student: Alfia Pasquini  
Supervisor: Fabio Mantovani  
Assistant supervisor: Tommaso Colonna

2007-2008 – Master’s Degree in Applied Geology (Center for GeoTechnologies – University of Siena)  
[Caratterizzazione di depositi argillosi nella Sardegna nord-occidentale mediante modelli di resistività elettrica](#)

Student: Ivan Comes  
Supervisor: Fabio Mantovani  
Assistant supervisor: Tommaso Colonna

2007-2008 – Master’s Degree in Applied Geology (Center for GeoTechnologies – University of Siena)  
[Studio di modelli di resistività finalizzati alla caratterizzazione di un acquifero in località Bassa \(Cerreto Guidi-Firenze\)](#)

Student: Catia Salvadori  
Supervisor: Fabio Mantovani  
Assistant supervisor: Claudio Rossi

2007-2008 – Master’s Degree in Applied Geology (Center for GeoTechnologies – University of Siena)  
[La Paleofrana di Aulla: uno studio comparato dei modelli geologici, geomorfologici e di resistività](#)

Student: Italo Giuseppe Di Giovanni  
Supervisor: Luigi Carmignani  
Assistant supervisor: Fabio Mantovani

#### **BACHELOR THESIS SUPERVISOR OR ASSISTANT SUPERVISOR**

2019-2020 – Bachelor’s Degree in Physics (University of Ferrara)  
[Tecniche di spettroscopia gamma e di telerilevamento di dati SAR Sentinel-1 per la stima del contenuto d’acqua del suolo in agricoltura di precisione](#)

Student: Martina Natali  
Supervisor: Fabio Mantovani  
Assistant supervisor: Virginia Strati

2016-2017 – Bachelor’s Degree in Geological Sciences (University of Ferrara)  
[Modellazione dei geoneutrini prodotti dalla crosta superiore nell’intorno del detector SNO+ \(Canada\)](#)

Student: Sara Gizzi  
Supervisor: Fabio Mantovani  
Assistant supervisor: Virginia Strati

2016-2017 – Bachelor’s Degree in Geological Sciences (University of Ferrara)  
[Studio del contenuto di radionuclidi naturali e del calore radiogenico delle rocce del complesso plutonico Carbonifero-Permiano sardo](#)

Student: Nicola Tesaro  
Supervisor: Fabio Mantovani  
Assistant supervisor: Virginia Strati

2015-2016 – Bachelor’s Degree in Physics (University of Ferrara)  
[Esposizione della popolazione della regione Umbria ai raggi cosmici: modelli e distribuzioni spaziali](#)

Student: Alessandra Giulia Cristina Raptis  
Supervisor: Fabio Mantovani  
Assistant supervisor: Virginia Strati

2015-2016 – Bachelor’s Degree in Information Technology (University of Ferrara)  
[Sviluppo di un sistema client-server e di interfacce grafiche per l’analisi spettrometrica a bordo di un rivelatore portatile di radiazione gamma](#)

Student: Enrico Chiarelli  
Supervisor: Fabio Mantovani  
Assistant supervisor: Matteo Turisini

2013-2014 – Bachelor’s Degree in Physics (University of Ferrara)  
[Modelli di distribuzione di Radon in atmosfera finalizzati alla correzione di misure di spettroscopia gamma airborne](#)

Student: Nicola Ronca  
Supervisor: Fabio Mantovani

Assistant supervisor: Marica Baldoncini

2011-2012 – Bachelor's Degree in Physics (University of Ferrara)

[La distribuzione del fallout di  \$^{137}\text{Cs}\$  in alcuni suoli delle Prealpi venete](#)

Student: Aurora Clerici

Supervisor: Fabio Mantovani

Assistant supervisor: Gerti Xhixha

2009-2010 – Bachelor's Degree in Physics and Astrophysics (University of Ferrara)

[Studio del segnale di anti-neutrini da reattore nell'esperimento Borexino](#)

Student: Silvia Vitali

Supervisor: Fabio Mantovani

Assistant supervisor: Barbara Ricci

2009-2010 – Bachelor's Degree in Physics and Astrophysics (University of Ferrara)

[La distribuzione angolare di anti-neutrini in un detector a liquido scintillante di grandi dimensioni: un caso di studio sul detector LENA](#)

Student: Provenzano Andrea

Supervisor: Fabio Mantovani

Assistant supervisor: Barbara Ricci

2008-2009 – Bachelor's Degree in Physics (University of Ferrara)

[Applicazione del metodo Non Negative Least Square alla Full Spectrum Analysis nel processo di calibrazione di uno spettrometro diraggi gamma portatile](#)

Student: Baldoncini Marica

Supervisor: Fabio Mantovani

Assistant supervisor: Carlos Rossi Alvarez

2007-2008 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Studio dell'efficacia del metodo della resistività elettrica su rocce Zeolitizzate, nella zona del Mejlogu \(SS\)](#)

Student: Riccardo Bianchi

Supervisor: Fabio Mantovani

Assistant supervisor: Tommaso Colonna

2007-2008 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Studio di tomografie elettriche finalizzato alla stima dei livelli saturi presso il lago Baratz \(SS\)](#)

Student: Marco Abbigliati

Supervisor: Fabio Mantovani

Assistant supervisor: Tommaso Colonna

2006-2007 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Caratterizzazione idrogeologica del Borro del Giglio \(Montevarchi\) attraverso indagini geofisiche](#)

Student: Riccardo Barletta

Supervisor: Fabio Mantovani

Assistant supervisor: Rudy Rossetto

2006-2007 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Prospezioni geoelettriche finalizzate allo studio delle argille in sistemi alluvionali nell'area della Nurra \(SS\)](#)

Student: Andrea Cacioli

Supervisor: Fabio Mantovani

Assistant supervisor: Tommaso Colonna

2005-2006 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Prospezioni geoelettriche per lo studio di un tratto di percorso dell'acquedotto romano in Località Sesto Fiorentino \(FI\)](#)

Student: Nadia Bianconi

Supervisor: Riccardo Salvini

Assistant supervisor: Fabio Mantovani

2005-2006 – Bachelor's Degree in Geotechnologies (Center for GeoTechnologies - University of Siena)

[Misure di resistività finalizzate allo studio ed alla modellazione della "villa romana" rinvenuta in località Torracchia di Chiusi \(San Gimignano - SI\)](#)

Student: Giulia Ricciardi

Supervisor: Fabio Mantovani