

Lorenzo Rinaldi

Working Address:

Physics and Astronomy Department
via Irnerio 46, 40126 Bologna

e-mail:

lorenzo.rinaldi@unibo.it,
lorenzo.rinaldi@bo.infn.it

Citizenship: ITALIAN

EDUCATION AND TRAINING

- 2002-2006 PhD in Physics (University of Bologna)
- 1997-2002 Master Degree in Physics (University of Bologna)

WORK EXPERIENCE

- Feb 2019 to present: Associate Professor, Bologna University, Department of Physics and Astronomy “Augusto Righi”
- Feb 2017 to Feb 2019: Senior Fixed Term Researcher (RTD-B) Bologna University, Department of Physics and Astronomy “Augusto Righi”
- Apr 2016 to Feb 2019 Junior Fixed Term Researcher (RTD-A), Bologna University, Department of Physics and Astronomy “Augusto Righi”
- 2012 to 2014 Lecturer at Bologna University, Department of Physics and Astronomy “Augusto Righi”
- Jan 2008 to Jun 2012 Research Associate (Assegno di Ricerca) INFN-CNAF
- Sep 2006 to Dec 2007 Post-Doc (DESY fellow) DESY Laboratory, Hamburg (Germany)

SCIENTIFIC ACTIVITIES

- Since 2024: Italian coordinator of the ATLAS-computing activities.
- Member of the International Computing Board of the ATLAS experiment (since 2021)
- “Incarico di Ricerca Scientifica”, National Institute for Nuclear Physics (Since 2016)
- CERN Collaborator, member of the ATLAS Collaboration, Experimental Physics Dept., European Organization for Nuclear Research, Geneva (CH) (Since 2008)
- Member of the Italian Computing User Support team of the ATLAS experiment (since 2008)
- Collaboration with HEPiX benchmark group for the development of a fast HEP-benchmark procedure (2019 - 2020)
- development of tracking and trigger algorithms on General Purpose computing on Graphics Processing Units (GPGPU), and integrating such pattern recognition techniques within the software-framework of the ATLAS trigger system (2016-2019)
- optimization of the access to the LHC data using the Grid and Cloud Computing approach (2014-2016)

- member of the INFN-CNAF User Support team (2008-2012)
- optimization of the computing activities of the ATLAS experiment at INFN Tier-1 computing center (2008-2012)
- technological association with INFN (2008-2012)
- study of leading baryon production in DIS electron-proton collision at HERA with the ZEUS detector (2002-2007)
- Study of W^{+-} boson production in DIS events at HERA with the ZEUS detector (2002)

COORDINATION ROLES

- Italian coordinator of the ATLAS-computing activities
- Co-Coordinator of the Italian Tier-2 Federation for the computing activities of the ATLAS experiment (since 2021)
- Management and coordination of the ATLAS Conditions Database distribution on Grid infrastructures and on the ATLAS HLT farm (since 2014)
- In charge of the Tier-3 computing farm of the INFN-Bologna for the computing activities of the ATLAS experiment (since 2012)

PERSONAL SKILLS

Mother tongue: Italian

Other languages: English (C1), Spanish (B2)

JOB-RELATED SKILLS

Digital skills:

Operating systems: Unix/linux, Win and MacOS; programming languages: FORTRAN, C, C++, Python, html, CUDA, shell scripting; Scientific tools: ROOT, PAW, MATLAB; ML/DL programming tools: TensorFlow, Keras, Pandas etc...; batch systems: HTCondor, LSF, SLURM ; distributed computing middleware: SRM clients, GFAL utilities, Rucio; containers (Docker, Apptainer); productivity SW: MS office, Latex

Very good scientific communication and public speaking skills. Experience in operations and on-duty shift (teamwork and problem solving).

Use of ML/DL techniques for automating cell counting in fluorescent microscopy.

BIBLIOMETRICS (November 2022)

H-index (15 years): 122

Citations (15 years): 69285

Number of publications (past 10 years) 886

CONFERENCES AND WORKSHOPS

Participation in national and international conferences in the field of High Energy Physics and Scientific Computing.

- LOW-X 2005 Sinaia (Romania) 2005 June 29th July 2nd;
Talk: "Leading Baryon production at HERA"
- DIFFRACTION 2006 Milos (Greece) 2006 September 5th-10th ;
Talk: "Leading baryon production in ep collisions"

- SMALL-X and DIFFRACTION FERMILAB - Batavia (USA) 2007 March 28th -31st ;
Talk: “Leading baryon production in ep collisions”
- LOW-X 2007 Helsinki (Finland) 2007 August 29th September 2nd,
Talk: “Leading Baryon production at HERA”
- DIS 2008 Londra (United Kingdom) 2008 April 20th -27th ;
Talk: “Leading Proton production at HERA”
- CHEP2012 New York (USA) 2012 May 21st -25th
Poster: “ATLAS computing activities and developments in the Italian Grid cloud”;
- TIPP14 Amsterdam (The Netherlands) 2014 June 2nd - 6th
Poster: “GPU for triggering in High Energy Physics”
- GPU Computing in HEP Pisa (Italy) 2014 September 10th - 12th ;
Talk: “GPGPU for track finding and triggering in High Energy Physics”;
- CHEP2016 San Francisco (USA) 2016 October 10th -14th
Talk: Collecting conditions usage metadata to optimize current and future ATLAS software and processing
Posters: First use of LHC Run 3 Conditions Database infrastructure for auxiliary data files in ATLAS, Elastic extension of a local analysis facility on external clouds for the LHC experiments
- CHEP2018 Sofia (Bulgaria) 2018 July 9th -13th
Talk: Conditions evolution of an experiment in mid-life, without the crisis (in ATLAS) Poster: Optimizing access to conditions data in ATLAS event data processing
- CHEP2023 Norfolk, VA (USA)
- CHEP2024 Cracow (Poland)

GRANTS and PROJECTS

- Dec 2017: Eligible for the annual research funding program (Legge 11 dicembre 2016, n.232, art.1, commi 295-302); Scientific production score: 100
- 2014-2016: Participation to the project PRIN "Development of technologies for the optimization of access to LHC data, transferable to other scientific domains, through the grid and cloud computing approach", UniBo Local Unit

TEACHING AND ACADEMIC ACTIVITIES

Director of the Bachelor degree in Physics at Bologna University.

Supervision of Degree and PhD Thesis in Computing Engineering, Physics, Data Science and Computation.

Since 2018: Co-lectureship in Software and Computing for Nuclear and Subnuclear Physics (Physics)

Since 2017: Lectureship in General Physics (Computer Engineering)

Since 2014: Co-lectureship in General Physics and Electromagnetism (Physics)

From 2012 to 2014: Lectureship in General Physics (Management Engineering and Land and Environmental Engineering)

From 2010 to 2014: Tutorship in General Physics and Electronic Laboratory (Physics)

Delegate for Guidance of the School of Science and Physics and Astronomy Dept. of Bologna University (Since 2019) Member of “Terza Missione” Commission of Physics and Astronomy Dept. of Bologna University (Since 2021)

Department. Contact fo UNIBO OpenScience Working group

Commissioni concorso INFN
Commissario Phd (Cosenza)

OUTREACH

- Participation in “Notte dei Ricercatori” Outreach Event in 2018 and 2019 editions
- Organization of “Alternanza Scuola Lavoro” activities (2019)

EVENTS ORGANISATION

Member of the Local Committee of the ICHEP2022 conference (Bologna 6-13 July 2022)

CURRICULUM VITAE

MARTINA ALLEGRO

INFN - Sezione di Bologna e CNAF

Viale Berti Pichat 6/2

40127 Bologna

E-mail: martina.allegro@bo.infn.it

Tel. : 051 2095261

STUDI

- **1986:** Maturità Tecnica - Diploma di Ragioniere e Perito commerciale conseguita presso l'I.T.C.G. "Leon Battista Alberti" di Abano Terme (PD) con la votazione di 56/60.

INCARICHI E RESPONSABILITÀ

- **Dal 2/2015:** Responsabile Amministrativo della Sezione INFN di Bologna e del CNAF (accorpamento dei Servizi avvenuto a fine 2013).

PROGRESSIONI DI CARRIERA

- **Dal 1/1/2013:** Collaboratrice di amministrazione V livello presso INFN-Sez. di Bologna e CNAF
- **1/3/2004 - 31/12/2012:** Collaboratrice di amministrazione VI livello presso INFN-Sez. di Bologna
- **20/7/1994 – 28/2/2004:** Collaboratrice di amministrazione VII livello presso INFN-Sez. di Bologna
- **1/6/1992 – 19/7/1994:** Collaboratrice di amministrazione VII livello TD ex art.7 presso INFN-CNAF

ATTIVITÀ SVOLTA

Dal 1/2/2015 svolgo il ruolo di Responsabile Amministrativo della Sezione di Bologna e del CNAF, in seguito all'accorpamento dei Servizi, avvenuto poco prima (fine 2013). Mi occupo della gestione amministrativo-contabile di due bilanci separati con un'assegnazione complessiva di circa 12 M€.

Il Servizio oggi supporta e fornisce consulenza operativa a circa 350 colleghi tra dipendenti delle due Strutture INFN, personale universitario con incarico di ricerca all'INFN e altri associati. Coordino 7 collaboratrici d'amministrazione che svolgono le diverse mansioni: ordini, fatture, pagamenti, missioni, inventario e rendicontazione dei fondi esterni.

Gestisco, supporto, controllo e/o rendiconto la parte amministrativa di diversi progetti esterni, di varia provenienza: PNRR, H2020 e H-EUROPE, POR-FESR, PRIN, POC, MUR, MISE, ASI, ACRI, etc.

Bologna, 20/05/2025

Martina Allegro

CURRUCULUM VITAE

ELISA ZINI

INFN – Sezione di Bologna e CNAF

STUDI

- **2011:** Maturità tecnica - Diploma di Ragioniere Perito commerciale e Programmatore, conseguito presso l'Istituto tecnico commerciale "Crescenzi Pacinotti" di Bologna.

ESPERIENZA LAVORATIVA

- **Dal 01/01/2024:** Collaboratrice di amministrazione VI livello TI presso INFN Bologna.
- **01/03/2022 – 31/12/2023:** Collaboratrice di amministrazione VII livello TI presso INFN Bologna.
- **20/01/2020 – 28/02/2022:** Collaboratrice di amministrazione VII livello TD ex art.15 presso INFN Bologna.

ATTIVITÀ SVOLTA

Attività di gestione ed elaborazione di missioni Italia/Estero per il personale dipendente e associato sia per la Sezione di Bologna sia per il CNAF. Monitoraggio, liquidazione e pagamento di missioni interessate nella rendicontazione dei Progetti Europei.

Gestione, elaborazione e pagamento pratiche relative ad attività svolte da personale esterno per seminari, partecipazione a comitati scientifici e collaborazioni.

Supporto amministrativo alla gestione informatica dei profili gestionali di sezione: monitoraggio della piattaforma di certificazione dei crediti PCC, creazione e aggiornamento della pagina di competenza del Servizio di Amministrazione nel sito web della Sez. Bologna.

Supporto a Ufficio Ordini per attività di smistamento e riscontro fatture, emissione di mandati di pagamento e/o reversali di incasso, emissione note di carico e/o scarico materiale inventariale.

Altre attività svolte: dal 06/2022 ricopro il ruolo di Referente Locale per la Transizione Digitale per la Sezione Bologna.

Bologna, 21/05/2025

Elisa Zini