

Curriculum Vitae

Personal information

First name(s) / Surname(s) **Luca Bertini**

Address(es)

Telephone(s)

E-mail

Nationality

Date of birth

Work experience

Dates **11/2020 – 01/2024**

Occupation **Ph.D. in Physics**

Ph.D. project *Flexibility of Human Telomeric G-quadruplexes in the Monomeric and Multimeric States*

Name of employer **Università degli Studi di Perugia**

Teaching experience

Dates **11/2023 – on going**

Occupation **Teaching experience as tutor**

Course *Fisica I – Dipartimento di Ingegneria Civile e Ambientale (100 hours)*

Name of employer **Università degli Studi di Perugia**

Dates **07/2022**

Occupation **Teaching experience as tutor**

Course *Corso di Fisica – progetto “Scuola si riparte” – Dipartimento di Chimica, Biologia e Biotecnologie (100 hours)*

Name of employer **Università degli Studi di Perugia**

Dates **10/2021 – 11/2021**

Occupation **Teaching experience as tutor**

Course *Corso di allineamento per Fisica – Dipartimento di Fisica e Geologia (20 hours)*

Name of employer **Università degli Studi di Perugia**

Conferences

Dates **06/2022**

Conference **8th International Meeting on Quadruplex Nucleic Acids** (Poster contribution)

Dates **03/2023**

Conference **European Conference on Neutron Scattering (ECNS) 2023** (Poster contribution)

Dates | **05/2023**
Conference | **6th Conference on Frontiers in Water Biophysics (FWB)** (Oral contribution)

Dates | **09/2023**
Conference | **XXXIV Congresso Annuale SISN** (Oral contribution)

Experience at Large Scale Facilities

Dates | **31/01/2023**
Name and type of organization/event | Taking part to the Experiment **MX-2398**
Title of the Project | *Small Angle Scattering on Tel22 and Tel48*
Main Activities | Use of small angle X-ray diffractometer BM29 (ESRF, Grenoble, FR)

Dates | **23/06/2023**
Name and type of organization/event | Taking part to the Experiment **MX-2498**
Title of the Project | *Small Angle Scattering on Tel22 and Tel50*
Main Activities | Use of small angle X-ray diffractometer BM29 (ESRF, Grenoble, FR)

Dates | **04/11/2023**
Name and type of organization/event | Taking part to the Experiment **MX-2498**
Title of the Project | *Small Angle Scattering on Tel22 and Tel50*
Main Activities | Use of small angle X-ray diffractometer BM29 (ESRF, Grenoble, FR)

Publications

Dates | **2023**
Title | Stacking Interactions and Flexibility of Human Telomeric Multimers

Benedetta Petra Rosi, Valeria Libera, **Luca Bertini**, Andrea Orecchini, Silvia Corezzi, Giorgio Schirò, Petra Pernot, Ralf Biehl, Caterina Petrillo, Lucia Comez, Cristiano De Michele, and Alessandro Paciaroni, **J. Am. Chem. Soc.** **2023**, **145**, **16166-16175**

Dates | **2023**
Title | Polymorphism and Ligand Binding Modulate Fast Dynamics of Human Telomeric G-Quadruplexes

Luca Bertini, Valeria Libera, Francesca Ripanti, Francesca Natali, Marco Paolantoni, Andrea Orecchini, Alessandro Nucara, Caterina Petrillo, Lucia Comez, and Alessandro Paciaroni, **Int. J. Mol. Sci.** **2023**, **24(5)**, **4280**

Dates | **2022**
Title | Role of fast dynamics in the complexation of G-quadruplexes with small molecules

Luca Bertini, Valeria Libera, Francesca Ripanti, Tilo Seydel, Marco Paolantoni, Andrea Orecchini, Caterina Petrillo, Lucia Comez, and Alessandro Paciaroni, **Phys. Chem. Chem. Phys.** **2022**, **24**, **29232-29240**

Education

Dates	02/2019 – 07/2020
Title of qualification awarded	Master's Degree in Physics 110/110 cum laude
Master's thesis title	<i>Nanosecond dynamics of G-quadruplex DNA in the presence of anticancer drugs</i>
Tutors	Prof. Alessandro Paciaroni and Dr. Lucia Comez
Name and type of organization providing education and training	Università degli Studi di Perugia
Dates	10/2015 – 12/2018
Title of qualification awarded	Bachelor's Degree in Physics 110/110 cum laude
Bachelor's thesis title	<i>Realistic calculation of ^3He magnetic form factor</i>
Tutor	Prof. Sergio Scopetta
Name and type of organization providing education and training	Università degli Studi di Perugia
Dates	09/2010 – 07/2015
Title of qualification awarded	High school diploma 100/100 cum laude
Name and type of organization providing education and training	Liceo Scientifico "Italo Calvino"

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment <i>European level (*)</i>	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
Language ENGLISH	B2	B2	B2	B2	B2
Language FRENCH	B1	B1	B1	B1	B1

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences | Good communication, cooperation and teamwork skills.

Experimental skills and competences | **Sample Preparation:** preparation of solutions of biomolecules in diluted and crowded conditions. Preparation of lyophilized powders of biomolecules. Limited experience in Size Exclusion. **Experimental Techniques:** Circular Dichroism, UV-Visible Absorption Spectroscopy, FTIR Spectroscopy, Small Angle X-Ray Scattering, Elastic Incoherent Neutron Scattering, Quasi-Elastic Incoherent Neutron Scattering.

Computer skills and competences | Coarse-Grained Monte Carlo Simulations, Simulation of Structure Factors from SAXS data. I have an intermediate/advanced knowledge of Python. I have an intermediate knowledge of C++, Gnuplot, Origin, Tex.

Driving licence | B

Peruiga, 07/01/2024