CV of Fabio Ferri
(short version, January 2026)

Academic position
Associate Professor of Physics (FIS/03, Condensed Matter Physics) at the Department of Science and High Technology, University of Insubria at Como, Italy.

Qualified for Full Professorship (Abilitazione Scientifica Nazionale) in 02/B1 (Fisica sperimentale della materia) and in 02/B1 (Fisica applicata, didattica e storia della fisica)

Scientific curriculum
1982 Laurea in Physics, University of Pisa, Italy. Tutor: Prof. Erseo Polacco (score 110/110).
1983-1987 Ph.D. student in Physics, University of Milan, Italy. - Tutor: Prof. Marzio Giglio.
1987-1989 Fellowship at the University of Milan, Italy
1989-1991 Postdoc in Physics, University of California, USA. Tutor: Prof. D.S. Cannell.
1991-1993 Teacher of Physics at Italian public high schools.
1993-2014 Researcher in Physics, University of Insubria at Como, Como, Italy.
2014 - Associate Professor in Condensed Matter Physics – sector FIS/03.

Research appointments and expertise
Responsible of the "Light Scattering " laboratory in Como (http://www.dfm.uninsubria.it/laboferri/) working in the field of coherent statistical optics, colloidal aggregation, biopolymer gels, complex fluids. Main laboratory activities are: development of new optical methods for static and dynamic light scattering, novel imaging techniques (ghost imaging), speckle metrology, particle sizing, velocimetry. The current research activity is mainly focused on (i) study of the growth kinetics and structure characterization of fibrin gels by using Light Scattering, turbidimetry, and Small angle X-ray Scattering techniques; (ii) development of new software correlators for Dynamic Light Scattering and Fluorescence Correlation Spectroscopy; (iii) design of Ghost Imaging protocols for biomedical or environmental applications where the presence of a turbulent or a highly scattering medium impairs the use of traditional imaging techniques; (iv) development of new inversion algorithms for particle sizing from light scattering, turbidimetry and and Wide Angle X-ray Total Scattering (WAXTS) data.

Cofounder of the Total Scattering Laboratory (To.Sca.Lab - http://toscalab.uninsubria.it/), a new (started in 2013) interdisciplinary project merging theoretical and experimental expertise in Chemistry, Crystallography and Physics within a unifying technical background based on Scattering Technique, from X-rays to Visible Light. To.Sca.Lab aims at the reconstruction of the structural and dynamic behavior of nanocrystalline, partially ordered and disordered materials at different length scales (ranging from atomic resolution up to the mm size), and to correlate it with the material functional properties. By exploiting local and external resources [Paul Scherrer Institute (CH), iNano department (DK)], To.Sca.Lab offers the opportunity of charactering nanomaterials through variety of different experimental techniques: SAXS (Small Angle X-ray Scattering), WAXTS (Wide Angle X-ray Total Scattering), DLS (Dynamic Light Scattering), WA-SLS (Wide Angle-Static Light Scattering), LA-SLS (Low Angle-Static Light Scattering), ABS (absorbance), PL (photoluminescence). Conventional, dedicated and open source software packages for data analysis are also available at To.Sca.Lab, allowing researchers to freely exploit many different tools (Debussy suite, inversion algorithms, global fitting analysis). To.Sca.Lab also deals with basic and applied research projects, and provides advanced teaching, through the organization of seminars and dedicated Summer Schools (Toscalake), which are taken every two years. Finally, To.Sca.Lab offers the advantage of a

young, stimulating and proactive environment, where the spreading of knowledge on scattering techniques is promoted through the creation of a network of collaborations, at both National and International levels.

Teaching experiences
Current courses been taught include:
Lab "5": coherent and statistical optics laboratory (the Bachelor degree in Physics)
Light Scattering Lab: laboratory course on static and dynamic light scattering techniques (Master degree in Physics).
Analysis of optical signals: class course on the techniques for data and image processing in optics (Master degree in Physics).
Member of the Faculty Ph.D. School of Physics and Astrophysics, University of Insubria, Italy

Grants as partecipant
CNR_95 (01-01-1996 al 01-01-1998) "Structure and kinetics of fibrin gels" [18.000 Euro, 24 months]; National coordinator: Prof. G. Arcovito (Università Cattolica S. C., Roma); role: local scientific coordinator.
ASI ARS-98-30 (01-01-1998 al 31-12-2002) "Blood coagulation in microgravity: hydrodynamic study of the fibrinogen-fibrin conversion" [115.000 Euro, 60 months]; National coordinator: M. Rocco, IST-CBA, Genova; role: local scientific coordinator.
INFM – PAIS_2002 (01-01-2003 al 01-01-2004) "Near field scattering, a novel technique for optical particles sizing (PAIS) " [35.000 k€, 24 months]. Principal Investigator: Marzio Giglio (UniMi); role: local scientific coordinator.
MIUR-PRIN_2005 (dal 01-01-2006 al 01-01-2008) "Applications of twin beams to quantum imaging and technology" [132.000 Euro, 24 months]; Principal Investigator: Luigi Lugiato (Insubria); role: participant of the local research unity.
CARIPLO- 2009 ([440.000 € , 36 months]): "STELLA: A School for Training in Experiments with Lasers, Laser applications and gravitational physics"; Principal Investigator: Paolo Di Trapani (Insubria); role: participant of the local research unity.
European Project FP7-SME_2010 (01-09-2010 al 01-09-2013): "CoeLux- Natural Sky Light in Artificial Illumination by using transparent nano-composites optics" [1.630.000 €, 36 months]; Principal Investigator: Paolo Di Trapani (Insubria); role: participant of the local research unity.
Cariplo_2016 "HYPATIA (01-04-2017 al 30-09-2019) - Romancing the stone: size-controlled HYdroxyaPATItes for sustainable Agriculture (HYPATIA)" [280.000 €, 30 months]; Principal Investigator: Norberto Masciocchi (Insubria); role: participant of the local research unity.
PRIN_2017 (20-06-2019 - present) - "HY-TEC - Hybrid ThermoElectric Composites: Proof-of-concepts for low-T, n-type and flexible thermoelectrics" [347.720 Euro, 36 months]; Principal Investigator: Norberto Masciocchi (Insubria); role: participant of the local research unity.

Grants as PI
CARIPLO_1996 (01-01-1996 al 01-01-1998) "Particle sizing for environmental applications" [25 kEuro, 24 months]; role: Principal Investigator.
INFM_2001 (01-01-2001 al 01-01-2002) - Divulgazione Scientifica: "Irreversible growth processes leading to formation of fractal structures: a PC simulation study" Role: Principal Investigator.
Regione. Lombardia DOTE_2010.(01-01-2011 al 01-01-2013) "Biomedical Applications for Ghost Imaging" [44.000 € , 24 months]; role: Principal Investigator

National and international collaborations
CNR - Istituto di Fotonica e Nanotecnologie, Milano - *Dr. Alessandra Gatti.*
CNR - Istituto di Cristallografia, Bari - *Dr. Antonietta Guagliardi.*
Università degli Studi dell'Insubria, Como - *Prof. Norberto Masciocchi.*
Università degli Studi dell'Insubria, Como - *Prof. Marco Donatelli.*

Istituto Nazionale Ricerca sul Cancro, Centro di Biostrutture, Genova – *Dr. Mattia Rocco.*
Università degli Studi di Milano, *Dr. Roberto Cerbino.*
Physics Department, University of Fribourg (Switzerland) - *Prof. Frank Scheffold.*
Physics Department, University of California Santa Barbara - *Prof. David S. Cannell.*
Institut de Ciències Fotòniques (ICFO) Barcelona, Spain – *Prof. T. Durduran.*
Synchrotron SOLEIL – SWING beam line *Dr. J. Perez.*
Chemistry Department, Aarhus University, Denmark – *Prof. Jan Skov Pedersen.*

Citations & Hirsch index

He has published more than 80 papers in the research fields of coherent optics, light scattering, x-ray scattering, ghost imaging, colloidal aggregation, polymeric gels, complex fluids and particle sizing. His research activity has been presented in many (>50) National and International Conferences, including several invited talks, seminars and lectures delivered in National and International Schools and Universities. Current citation metrics are:

Isi Web of Science: H = 27, citations >3700 (>3500 without self-citations).

WOS: https://https://www.webofscience.com/wos/author/record/C-6026-2008
ORCID: https://orcid.org/0000-0003-2802-5181

ERC Fields

PE3_13 Structure and dynamics of disordered systems: soft matter (gels, colloids, liquid crystals, etc.), liquids, glasses, defects, etc.
PE3_15 Statistical physics: phase transitions, noise and fluctuations, models of complex systems, etc.
PE3_16 Physics of biological systems