

Niccolò Traverso Ziani

Professore associato

ISTRUZIONE E FORMAZIONE

2014

Dottorato in Fisica

Luttinger liquid theory of local transport in correlated 1D structures (Excellent)
Università di Genova

2011

Laurea specialistica in Fisica

Transport properties of correlated carbon nanotube quantum dots (110/110 cum laude)
Università di Genova

ESPERIENZA ACCADEMICA

2021-2024

RICERCATORE (RTDb)

Università di Genova

2018-2021

RICERCATORE (RTDa)

Università di Genova

2014-2018

Post-Doc Researcher

University of Wuerzburg

INCARICHI ACCADEMICI

2022-

Membro del Consiglio del Dottorato in Fisica e Nanoscienze

Università di Genova

2025-

Membro della Commissione Ricerca del Dipartimento di Fisica

Università di Genova

TITOLI

PRINCIPALI SEMINARI

2025 – Charging free fermion quantum batteries, TOPNESS conference, Erice, Italy

2024 – Tailoring topological superconductivity, Stellenbosch-Hamburg condensed matter symposium, Stellenbosch, South Africa

2024 – Novel effects in quantum spin Hall-based Josephson Junctions, CMD31 conference, Braga, Portugal

2023 – Anomalous Josephson effect in topological insulators, New Trends in Non-Equilibrium Statistical Mechanics, Erice, Italy

2023 – Manipulating edge states, 109th National Congress of the Italian Physical Society (SIF), Salerno, Italy

2022 – Open questions on topological edge channels, Northern Lights conference 2022, Reykjavik, Iceland

2021 – Quantum spin Hall constrictions, CONMAT2021, Valencia, Spain 2021 – Majorana fermions in quantum spin Hall trenches, Virtual 107th National Congress of the Italian Physical Society (SIF)

2021 – Majorana fermions in quantum spin Hall trenches, Virtual Symmetry 2021 conference

2020 – Quantum spin Hall quantum point contacts, DPG meeting 2020, Dresden, Germany

2020 – Dynamical quantum phase transitions in the XY model, SFB workshop, Würzburg, Germany

2019 – Quantum spin Hall quantum point contacts, FisMat 2019, Catania, Italy

2019 – Luttinger liquid aspects of quantum spin Hall constrictions, SFB seminar, Würzburg, Germany

2018 – Nonmonotonic response and light-cone freezing in fermionic systems under quantum quenches, NePhys 2018, Salerno, Italy

2018 – Odd frequency superconductivity at the helical edge, TOPOTRONICS meeting and workshop, Rothenburg, Germany

2018 – Fractional charges and chiral anomaly at the helical edge, DPG meeting 2018, Berlin, Germany

2017 – Signatures of interaction-induced helical gaps in nanowire quantum point contacts, SFB1170 workshop 2017, Münsterschwarzach, Germany

2017 – Signatures of interaction-induced helical gaps in nanowire quantum point contacts, FISMAT 2017, Trieste, Italy

2016 – Fractional charges at the helical edge, Workshop on topological insulators and VTI workshop 2016, Jülich, Germany

2016 – Fractional Wigner crystal in the helical Luttinger liquid, Conference Gauge/Gravity Duality and Condensed Matter Physics, Banff, Canada

2016 – Fractional crystallization in helical systems, SFB1170 retreat and workshop 2016, Münsterschwarzach, Germany

2016 – Fractional Wigner oscillations in two-dimensional topological insulators, DPG meeting 2016, Berlin, Germany

2015 – Fractional charges at the helical edge, First international workshop on topological electronics (Topotronics), Okinawa, Japan

2013 – Luttinger liquid theory of local transport in interacting one-dimensional systems, RTG 1570 Workshop (Electronic properties of carbon-based nanostructures), Kreuth, Germany

RESPONSABILITÀ SCIENTIFICA PER PROGETTI DI RICERCA INTERNAZIONALI E NAZIONALI, AMMESSI AL FINANZIAMENTO SULLA BASE DI BANDI COMPETITIVI CHE PREVEDANO LA REVISIONE TRA PARI

2021 Understanding even odd criticality

Curiosity driven 2021

University of Genoa