

Scientific CV of Viktor Eisler

Personal data:

Viktor Eisler
Born in Budapest, Hungary, on April 20th, 1979.
Hungarian citizen

Address at work:

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Education:

- Habilitation, TU Graz, 2020
- PhD, Eötvös University, Budapest, 2006
Title: Fluctuations in strongly correlated equilibrium and nonequilibrium systems
Supervisor: Zoltán Rác
- MSc, Eötvös University, Budapest, 2002
Title: Dynamics of quantum systems in equilibrium and nonequilibrium steady states
Supervisor: Zoltán Rác

Experience:

- 2017 Sept. - : Principal Investigator, TU Graz
- 2015 Sept.- 2017 Aug. Lise Meitner Fellow, TU Graz
- 2014 Sept.- 2017 Jun.: Senior Research Fellow, Eötvös University, Budapest
- 2013 May- 2014 Aug.: Szent-Györgyi Fellow, Eötvös University, Budapest
- 2011 Mar.- 2013 Mar.: Postdoctoral Researcher, University of Vienna
- 2009 Jan.- 2010 Dec.: Postdoctoral Researcher, Niels Bohr Institute, Copenhagen
- 2006 Oct.- 2008 Dec.: Postdoctoral Research Associate, Freie Universität Berlin
- 2003 Sept.-2006 Sept.: Research Assistant, Eötvös University, Budapest

Awards and grants:

- FWF Stand-alone Project
Title: *Entanglement Hamiltonians in quantum many-body physics*
Agency: FWF, Austria
Duration: Dec. 2021-May 2025
Amount: 398.028 EUR
- FWF Stand-alone Project
Title: *Quantum fronts and entanglement driven by inhomogeneities*
Agency: FWF, Austria
Duration: Sep. 2017-July 2021
Amount: 396.506 EUR

- Lise Meitner Fellowship
Title: *Entanglement and correlations far from equilibrium*
Agency: FWF, Austria
Duration: Sept. 2015-Aug. 2017
Amount: 159.620 EUR
- Szent-Györgyi Fellowship
Title: *Front structures in quantum gases*
Agency: Department of Public Administration and Justice, Hungary
Duration: May. 2013-Aug. 2014
Amount: 8.000.000 HUF

Teaching:

Undergraduate courses in

- classical mechanics
- electrodynamics
- quantum mechanics
- thermodynamics and statistical physics

PhD students supervised:

- Matthias Gruber (2018-2021)

Language skills:

- Hungarian (native)
- English, German (fluent)
- Italian (intermediate)

Programming skills:

- Mathematica
- Matlab
- Fortran

Research interests:

- Entanglement properties in many-body quantum systems
- Quantum quenches and nonequilibrium dynamics
- Dynamics of open quantum systems

Refereeing:

- Physical Review A, B, X, Letters
- Journal of Statistical Mechanics
- New Journal of Physics
- Europhysics Letters
- SciPost Physics

Key invited talks at international conferences (2012-):

- 2012 Hsinchu (Taiwan), *Correlations and Entanglement in Many-body Systems Out of Equilibrium*
- 2014 Pont-à-Mousson (France), *Statistical Physics and Low Dimensional Systems*
- 2015 London (UK), *New Trends in Strongly Entangled Many-Body Systems*

- 2016 Natal (Brazil), *Quantum Non-Equilibrium Phenomena*
- 2018 Florence (Italy), *Entanglement in Quantum Systems*
- 2019 Natal (Brazil), *Emergent Hydrodynamics In Low Dimensional Quantum Systems*
- 2019 Pont-à-Mousson (France), *Statistical Physics and Low Dimensional Systems*

Publications and citations summary:

- 38 publications in international journals
- 1 [book chapter](#)
- 1 [review paper](#) on free-particle entanglement with >500 citations
- more than 2000 total citations ([Google Scholar](#))
- *h* index: 25 ([Google Scholar](#))
- full list of publications available on [ArXiv](#)