

# ETTORE MAJORANA FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE

# INTERNATIONAL SCHOOL OF NONEQUILIBRIUM PHENOMENA 15th Course

# Beyond Linearity: Frontiers in Non-Hermitian Many-Body Physics

# BLiNH25

# DESCRIPTION

The workshop aims at bringing together experts in the fields of non-Hermitian and quantum many-body physics to discuss recent advancements and future prospects at their intersection. The central goal of the workshop will be to delve into non-Hermitian physics beyond the linear regime.

BLiNH2025 will take place at the Ettore Majorana Foundation and Centre for Scientific Culture, within the framework of the School of Nonequilibrium Phenomena. The center is located in Erice, a picturesque historic town in the North-Western tip of Sicily. The closest airports are Palermo Punta Raisi and Trapani Birgi. On arrival and departure days, a shuttle service will be organized. Contributions from applicants, both in the form of talks and posters, are welcome. Please find more details on the website.

#### DATES

14-18 December 2025

## LOCATION

Ettore Majorana Foundation and Centre for Scientific Culture – Erice, Sicily, Italy

# TOPICS

- many-body and interaction-induced skin effects;
- nonlinear exceptional points and dynamics, skin solitons;
- non-Hermitian many-body localization, chaos and complexity;
- non-Hermitian topology;
- measurement-induced phase transitions;
- experimental platforms for non-Hermitian physics;
- open and monitored quantum many-body systems.

# INVITED SPEAKERS

- Emil Bergholtz (U. Stockholm)
- Giuliano Chiriacò (U. Catania)
- Aashish Clerk (U. Chicago)
- Giuseppe de Tomasi (U. Lisbon)
- Adolfo del Campo (U. Luxembourg)
- Louis Garbe (TU Munich)

#### **DEADLINE FOR APPLICATIONS**

1 September 2025

Applications received after the deadline will be considered depending on availability.

# ORGANIZING COMMITTEE

- Federico Balducci (MPI PKS, Dresden)
- Pietro Brighi (U. Vienna)
- Francesco Ciccarello (NEST & U. Palermo)
- Andreas Nunnenkamp (U. Vienna)
- Federico Roccati (U. Palermo)

# DIRECTORS OF THE SCHOOL

- Alessandra Lanzara (U. Palermo)
- Massimo G. Palma (U. Palermo)
- Bernardo Spagnolo (U. Palermo)

# CONTACTS

blinh.workshop2025@gmail.com

- Ryo Hanai (Institute of Science Tokyo)
- Kohei Kawabata (U.Tokyo)
- Flore Kunst (MPI for the Science of Light, Erlangen)
- Alexander Poddubny (Weizmann Institute)
- Tibor Rakovszky (Budapest U. Technology and Economics)
- Lucas Sá (U. Cambridge)
- Pablo Sala (CalTech)
- Marco Schirò (Collège de France)
- Xhek Turkeshi (U. Cologne)
- Ewold Verhagen (Center for Nanophotonics, AMOLF)
- Clara Wanjura (MPI for the Science of Light, Erlangen)
- Marko Žnidarič (U. Ljubljana)

# WEBSITES

### https://blinh2025.univie.ac.at/

https://ettoremajoranafoundation.it/

#### FEE

150€ per day, including accommodation, meals, coffee breaks, Marsala wine, social dinner, excursion, transfers to/from Palermo & Trapani airports