

**ICMU**INTERNATIONAL CENTRE
FOR MATHEMATICS
IN UKRAINE

Illustration: Marharyta Davydova

ICMU WINTER SCHOOL

4–22 January 2027

MATHEMATICS OF QUANTUM INFORMATION AND MATTER

VENUE*ICMU Working Space, Kyiv School of Economics (KSE)*

The aim of the school is to give a mathematically rigorous introduction to the cutting-edge intersection of quantum information, topological matter, and theoretical physics. Designed for advanced undergraduate and graduate students specializing in mathematics and physics, the program bridges deep mathematical structures with practical quantum applications

LECTURE COURSES**PREPARATORY COURSES**

NIKOLAI IORGOV, *Bogolyubov Institute of NASU / KAU*
KHYRSTYNA GNATENKO, *Ivan Franko National University of Lviv*
YURI ZHURAVLEV, *Bogolyubov Institute of NASU / KAU*

QUANTUM INFORMATION THEORY

ALEX MAY, *Perimeter Institute for Theoretical Physics*

QUANTUM ERROR CORRECTION

JONATHAN CONRAD, *École Polytechnique Fédérale de Lausanne*

TOPOLOGICAL PHASES

JULIO CARLOS MAGDALENA DE LA FUENTE, *Free University of Berlin*

TOPOLOGICAL BAND THEORY

ANDREI BERNEVIG, *Princeton University*

ORGANISERS

MYKOLA SEMENYAKIN, *Perimeter Institute for Theoretical Physics*
ALEX TURZILLO, *University of Cambridge*



INFORMATION AND REGISTRATION

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deadline 15 october 2026

KSEKyiv
School of
Economics