



**ICMU**

INTERNATIONAL CENTRE  
FOR MATHEMATICS  
IN UKRAINE

## ICMU SUMMER SCHOOL

27 July – 5 August 2026

# LINKS, BRAIDS, AND DIFFEOMORPHISMS OF SURFACES

### VENUE

“Kremenytysya” recreation centre, Vyzhnytsya, Chernivtsi region, Ukraine

Applications of links, braids, and diffeomorphisms of surfaces play a key role in many areas of mathematics, physics, chemistry, biology, cryptography, and other natural sciences. This school will introduce participants to knot theory and geometric topology and tailored for bachelor and master students.

### LECTURE COURSES

Alexander polynomials and fibered knots

Stefan FRIEDL, *Regensburg University, Germany*

Braid groups and their applications

Jarek KEDRA, *University of Aberdeen, Scotland*

Characterizing 3-manifolds by surgery

Marc KEGEL, *University of Seville, Spain*

Diffeomorphisms of surfaces

Sergiy MAKSYMENKO, *Institute of Mathematics of NAS of Ukraine*

From Morse Theory to Reeb Graphs: Topology Through Critical Points

Łukasz MICHALAK, *Adam Mickiewicz University, Poznań, Poland*

Knots and primes

Jun UEKI, *Ochanomizu University, Tokyo, Japan*

### ORGANISERS

Taras BANAKH, *Ivan Franko National University of Lviv*

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INFORMATION AND APPLICATION

**ICMU.UA**

deadline 15 April 2026

**EPFL**