

Tel Aviv University Nano Center Summer School 2022 on

# Quantum Materials Design by vdW Stacking, Sliding and Twisting

The in-person 4-days summer school will focus on electronic, optical, and mechanical phenomena stemming from the various stacking configurations and interlayer interactions in van der Waals structures (vdW). The school aims for a broad audience of graduate students (MSc and PhD) through post-docs, scientists, and engineers who wish to develop in the field. The sessions include tutorial talks followed by dedicated workshop sessions on recent challenges/opportunities, and a student poster competition. Research collaborations are further encouraged by social events that introduce the local research atmosphere and culture, including a half-day tour.

June 12 - 15, 2022 | Tel Aviv University

## Scope

- Emergent orders (correlated metals, insulators, magnets, ferroelectricity)
- Super-lubricity, strain engineering, and vdW mechanics
- Moire' physics in mismatched hetero-layers and twisted homo-layers
- Non-equilibrium excitations

## Chairs

Volodya Falko (Manchester)  
Jonathan Ruhman (BIU)  
Moshe Ben Shalom (Tel Aviv University)

## Venue

Tel Aviv University

## Program

The Program is Available at the [website](#)

## Poster Presentation

Students are encouraged to present a poster, and their work in a dedicated Poster Flash Session (up to 2 minutes per speaker)

**Best Posters will be Awarded!!!**

**Posters can be submitted by June 1, 2022.**

## Registration:

Is available at the [website](#)

## Foreign Students Support

Tel Aviv University Nano Center Summer School 2022 would like encourage and support graduated foreign students to attend the meeting. Further details can be found at the [website](#).

## Speakers

(partial alphabetic list)

Eric Akkermans (Technion-Israel Institute of Technology)  
Haim Beidenkopf (Weizmann Institute of Science)  
Erez Berg (Weizmann Institute of Science)  
Yan Binghai (Weizmann Institute of Science)  
Yoram Dagan (Tel Aviv University)  
Itai Epstein (Tel Aviv University)  
Vladimir Falko (The University of Manchester)  
Brian Gerardot (Heriot Watt University)  
Moshe Goldstein (Tel Aviv University)  
Roman Gorbachev (The University of Manchester)  
Asaf Hamo (Bar Ilan University)  
Moshe Harats (Ben-Gurion University)  
Nicholas Hine (University of Warwick)  
Oded Hod (Tel Aviv University)  
Shahal Ilani (Weizmann Institute of Science)  
Beena Kalisky (Bar Ilan University)  
Amit Keren (Technion-Israel Institute of Technology)  
Elad Koren (Technion-Israel Institute of Technology)  
Johannes Lischner (Imperial College)  
Adina Luican-Mayer (University of Ottawa)  
Eran Maniv (Ben-Gurion University)  
Artem Mishchenko (The University of Manchester)  
Doron Naveh (Bar Ilan University)  
Yuval Ronen (Weizmann Institute of Science)  
Jonathan Ruhman (Bar Ilan University)  
Eran Sela (Tel Aviv University)  
Efrat Shimshoni (Bar Ilan University)  
Hadar Shteinberg (The Hebrew University of Jerusalem)  
Haim Suchowski (Tel Aviv University)  
Michael Urbakh (Tel Aviv University)  
Sanfeng Wu (Princeton University)  
Eli Zeldov (Weizmann Institute of Science)