

# Tom Bleher

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## RESEARCH EXPERIENCE

### Tel Aviv University

*Research Assistant*

- Conducting simulations to evaluate particle detectors for the Electron-Ion Collider.

Tel Aviv, Israel

May 2024 – Present

### Max Planck Institute for Plasma Physics

*Research Assistant*

- Developed internal simulation tools to assess next generation fusion reactor concepts.

Munich, Germany

Sep 2024 – Oct 2024

### Max Planck Institute for Plasma Physics

*Research Assistant*

- Analyzed plasma profiles to examine impurity transport, contributed to an upcoming paper.

Greifswald, Germany

Feb 2024 – Apr 2024

### Institut national de la recherche scientifique

*Research Assistant*

- Developed software to optimize x-ray flux from laser wakefield acceleration by correction of optical components.

Montreal, Canada

Oct 2023 – Jan 2024

### Tel Aviv University (with Stanford)

*Research Assistant*

- Prepared CAD models and directed preparation for direct laser acceleration experiments from heavy water microjet.

Tel Aviv, Israel

Aug 2023 – Oct 2023

### Weizmann Institute of Science

*Research Assistant*

- Analyzed experimental data to examine theoretical predictions on ultra-light dark matter behavior.

Rehovot, Israel

Jul 2023

## EDUCATION

### Tel Aviv University

*Bachelor of Science in Physics and Mathematics*

- Coursework: Analysis I, Linear Algebra I, Expanded Intro to CS, Physics I, Set Theory, Physics Mathematical Methods I, Physics Lab I, British Culture I.

Tel Aviv, Israel

May 2024 – Dec 2027

### Herzliya Hebrew Gymnasium

*Physics, Mathematics, Computational Physics, Mechatronics*

- GPA: 93/100; SAT: 1490/1600 (Translates to Psychometric: 718/800)

Tel Aviv, Israel

Sep 2020 – Jun 2023

## PUBLICATIONS

- T. Romba, F. Reimold, S. Bannmann, A. Navarro, **T. Bleher**, et al. (2024). Characterizing scenarios of suppressed anomalous impurity transport in Wendelstein 7-X (Upcoming).

## AWARDS & RECOGNITION

- Awarded full-ride scholarship and selected to represent Israel in the Dr. Bessie F. Lawrence International Summer Science Institute (ISSI) at the Weizmann Institute of Science.
- Placed 2nd in the Schwartz-Reisman poster competition for computational physics with "Spontaneous Synchronization of Fireflies" and 3rd for "Wave Simulation in non-uniform Medium."

## LEADERSHIP & ACTIVITIES

### Hapoel Beit Dani Wrestling Club

*Wrestler, Team Captain*

- Led a team of 30 wrestlers, competing nationally and internationally, and served as a past Israel national team member. Organized and motivated team activities and training sessions.

Tel Aviv, Israel

Oct 2012 – Present

### Middle East Entrepreneurs of Tomorrow

*Student, Teaching Assistant*

- Instructed Python to high school students to enrich their existing curriculum.
- Facilitated learning by mentoring, hosting office hours, and creating team bonding activities, enhancing student engagement.

Jerusalem, Israel

Sep 2019 – Feb 2023

## SKILLS & INTERESTS

**Technical Skills:** Python, Linux, CAD, JavaScript, Git, LaTeX

**Foreign Languages:** Hebrew (Native), English (Bilingual), Lithuanian (Proficient), Russian (Conversational)

**Interests:** Guitar Playing, Vinyl Collecting, Classical Novels, History, Self-study