

PARADIM REU Community Impact

During the 2020 COVID shutdown, PARADIM kept its doors open and offered a remote REU program. This decision to run an engaging remote program aided in keeping future paths open for our undergraduate participants.

Zubia Hasan was a member of this 2020 cohort (Figure bottom right) and completed a project titled “*Strain-induced Super-conductivity in RuO₂*” guided by her mentor, Dr. Betul Pamuk of PARADIM’s Theory User Facility (now faculty at Williams College).

After graduating from Johns Hopkins, Zubia joined the PhD program in physics at Harvard University working in the lab of PARADIM user [Professor Julia Mundy](#). As part of her work at Harvard, Zubia returned as a PARADIM user working to synthesize and study novel quantum materials in the thin film limit. In 2025, Zubia presented her research on the superconductor lithium titanate (LiTi₂O₄) at the Fall Meeting of the Materials Research Society (MRS) in Boston and received the [MRS Fall Gold Graduate Student Award](#). A paper detailing the work has been accepted in Nature Communications.

During her time at Harvard, she was also awarded a [2022 Paul & Daisy Soros Fellowship](#) and received an honorable mention in the 2022 [NSF Graduate Research Fellowship](#).

As an aspiring scientist, Zubia hopes to continue to work at the forefront of materials discovery.

Jim Overhiser, PARADIM Director of Education and Outreach



2025 MRS Gold Graduate Student award recipient



https://www.paradim.org/reu_participants

