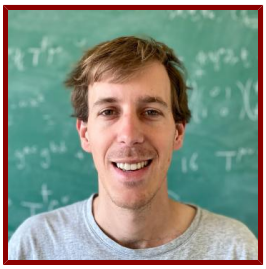
Stanford



Nicolo Danna

Postdoctoral Scholar, Applied Physics

Bio

BIO

Since his master's and PhD at ETH, Nicolò D'Anna's research has been dedicated to understanding and controlling quantum states of matter in low-dimensional solid-state systems. During his PhD he specialized in ultra-low-temperature magneto-transport to study dopant layers and structures in silicon for quantum computing. During his postdoc at UCSD, he focused on utilizing advanced coherent X-ray diffraction techniques to investigate metal-to-insulator transition switching in metal-oxides for neuromorphic applications. Currently, as an Urbanek-Chodorow postdoctoral fellow, he aims to achieve ultra-fast time-resolved optical interrogation and control of low-temperature quantum phases in synthetic stacked van-der-Waals systems, with a particular focus on magic-angle twisted bilayer graphene.

STANFORD ADVISORS

- Aharon Kapitulnik, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Self-Strain Suppression of the Metal-to-Insulator Transition in Phase-Change Oxide Devices** *SMALL*
  D'Anna, N., Ghazikhanian, N., Lamb, E. S., Zatterin, E., Wan, M., Thorshov, A., Schuller, I. K., Shpyrko, O.
  2026; 22 (5): e09287