



Philip Schuster

Professor of Particle Physics and Astrophysics

Bio

BIO

Professor Schuster is a theoretical physicist focused on identifying dark matter and its properties, developing concepts for new experimental tests of physics beyond the Standard Model, and studying novel theories of long-range forces. He is also directly involved in several experimental efforts as co-spokesperson for APEX, a founding member and physics coordinator for LDMX, and as a founding member of HPS.

Prospective graduate students interested in research rotations should contact Professor Schuster directly. Recent research directions include new ideas to detect axions, milli-charge dark matter, the use of novel accelerator experiments to search for light WIMP-like dark matter, and generalizations of gauge theories that include massless particles with continuous spin. Publications are listed on INSPIRE.

Professor Schuster is also chair of the Particle Physics & Astrophysics department at Stanford's SLAC National Accelerator Laboratory.

ACADEMIC APPOINTMENTS

- Professor, Particle Physics and Astrophysics

ADMINISTRATIVE APPOINTMENTS

- Department Chair, Particle Physics & Astrophysics, (2020- present)

HONORS AND AWARDS

- Ernest Orlando Lawrence Award, DOE (2021)
- New Horizons in Physics Prize, Fundamental Physics Prize Foundation (Nov. 2014)
- Early Researcher Award, Ontario (2015)
- Discovery Accelerator Award, NSERC (2012)

PROFESSIONAL EDUCATION

- Ph.D., Harvard University , Physics (2007)
- M.S., Harvard University , Physics (2005)
- S.B., Massachusetts Institute of Technology , Physics (2003)

LINKS

- Publications on INSPIRE: <https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=find%20a%20Philip%20Schuster>

Teaching

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Aidan Reilly, Kevin Zhou

Doctoral Dissertation Advisor (AC)

Sarah Gaiser, Shayarneel Kundu, Emrys Peets, Lillian Santos-Olmsted, Gowri Sundaresan