

Dr. Maria Elena Monzani, Lead Scientist

Kavli Institute for Particle Astrophysics and Cosmology
and Fundamental Physics Directorate
SLAC National Accelerator Laboratory
2575 Sand Hill Road, Menlo Park, CA 94025

Education

Università degli Studi di Milano	Milano, Italy	Particle Physics	PhD., 01/2005
Université Paris VII – Denis Diderot	Paris, France	Particle Physics	PhD., 01/2005
Università degli Studi di Milano	Milano, Italy	Astroparticle Physics	M.S., 03/2001

Appointments

04/2020 – Present	Lead Scientist	SLAC National Accelerator Laboratory
11/2021 – Present	Adjunct Scholar	Vatican Observatory, Rome, Italy
09/2016 – 03/2020	Staff Scientist	SLAC National Accelerator Laboratory
11/2007 – 08/2016	Engineering Physicist	SLAC National Accelerator Laboratory
01/2006 – 10/2007	Postdoctoral Research Scientist	Columbia University in the City of NY
11/2004 – 01/2006	Research Fellow	Laboratori Nazionali del Gran Sasso, Italy

Leadership Roles

2019 – Present	Department Head, LZ Operations	SLAC, Fundamental Physics Directorate
2018 – Present	Deputy Ops Manager, Computing	LZ Dark Matter Experiment, Operations
2016 – 2020	L2 Manager, Offline Computing	LZ Dark Matter Experiment, DOE Project
2012 – Present	Science Operations Lead	Instrument Science Ops Center, Fermi-LAT

Selected publications

1. D.S. Akerib et al. (LUX-ZEPLIN Collaboration), *Projected WIMP sensitivity of the LUX-ZEPLIN (LZ) dark matter experiment*, Phys. Rev. D 101, 052002 (2020)
2. B.P. Abbot et al. (LIGO and other collaborations), *Multi-messenger Observations of a Binary Neutron Star Merger*, Astrophys. J. Lett. 848 L12 (2017)
3. M. Ackermann et al. (Fermi-LAT Collaboration), *The Fermi galactic center GeV excess and implications for dark matter*, Astrophys. J. 840 43 (2017)
4. M. Ackermann et al. (Fermi-LAT Collaboration), *Detection of the characteristic pion-decay signature in supernova remnants*, Phys. Rev. Lett. 115 (23) (2016), Science 339 807 (2013)
5. M. Ackermann et al. (Fermi-LAT Collaboration), *A statistical approach to recognizing source classes for unassociated sources in the first Fermi-LAT catalog*, Astrophys. J. 753 83 (2012)

Awards and Synergistic Activities

- DPF Ethics Advisory Committee Chair, APS Division of Particles & Fields (2020 – 2021)
- Chair of the SLAC Users Organization (2010 – 2011, 2019 – present)
- NERSC Exascale Science Applications Program (NESAP) award (2019 – present)
- NASA’s Group Achievement Award to the Fermi Science team (September 2010)
- Member of the American Astronomical Society and American Physical Society