Stanford



Sanya Gupta

- Ph.D. Student in Physics, admitted Autumn 2025
- OAE Exam Assistant, Office of Accessible Education

Bio

EDUCATION AND CERTIFICATIONS

- BA, Barnard College, Columbia University , Physics (2025)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

My research interests focus on understanding magnetic fields and filaments from origin to their role in the generation of high energy astrophysical phenomena such as relativistic jets and relativistic plasmas around black holes and other compact objects that generate multi-messenger signals.

Publications

PUBLICATIONS

- **The MDW Hα Sky Survey: Data Release 1** *ASTRONOMICAL JOURNAL*
  Aftab, N., Zhang, X., Walker, S., di Cicco, D., Mittelman, D. R., Gupta, S., Saydjari, A. K., Putman, M., Schiminovich, D.
  2026; 171 (1)
- **The role of electric dominance for particle injection in relativistic reconnection** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Gupta, S., Sridhar, N., Sironi, L.
  2025; 538 (1): 49-59
- **Comptonization by reconnection plasmoids in black hole coronae - III. Dependence on the guide field in pair plasma** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
  Gupta, S., Sridhar, N., Sironi, L.
  2024; 527 (3): 6065-6075