

Stanford



Sanskriti Das

Postdoctoral Scholar, Physics

 Curriculum Vitae available Online

Bio

STANFORD ADVISORS

- Steven Allen, Postdoctoral Faculty Sponsor

LINKS

- Website: <https://sites.google.com/view/nicheofsanskriti/home>

Publications

PUBLICATIONS

- **Deep X-Ray Observation of NGC 3221: Everything Everywhere All at Once** *ASTROPHYSICAL JOURNAL*
Das, S., Mathur, S., Lehmer, B. D., Allen, S. W., Krongold, Y., Gupta, A.
2026; 997 (2)
- **Thermal Sunyaev-Zel'dovich Effect in the Circumgalactic Medium. II. Dependence on Star Formation** *ASTROPHYSICAL JOURNAL*
Das, S., Truong, N., Chiang, Y., Mathur, S.
2025; 991 (2)
- **Detecting the Effect of Nonthermal Sources on the Warm-hot Galactic Halo** *ASTROPHYSICAL JOURNAL LETTERS*
Das, S.
2024; 963 (2)
- **Detection of diffuse H i emission in the circumgalactic medium of NGC 891 and NGC 4565-II** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Das, S., Rickel, M., Leroy, A., Pingel, N. M., Pisano, D. J., Heald, G., Mathur, S., Kingsbury, J., Sardone, A.
2023; 527 (4): 10358-10375
- **Detection of Thermal Sunyaev-Zel'dovich Effect in the Circumgalactic Medium of Low-mass Galaxies-A Surprising Pattern in Self-similarity and Baryon Sufficiency** *ASTROPHYSICAL JOURNAL*
Das, S., Chiang, Y., Mathur, S.
2023; 951 (2)
- **Constraining the Subgalactic Relationship between Star Formation and the Hot Interstellar Medium in NGC 4254** *ASTROPHYSICAL JOURNAL*
Monson, E. B., Lehmer, B. D., Amiri, A., Barboza, K., Barnes, A. T., Basu-Zych, A. R., Dale, D. A., Das, S., Dlamini, S., Glover, S., Kreckel, K., Lopez, L. A., Lopez, et al
2026; 1001 (1)
- **Resolved H ii Regions in NGC 253: Ionized Gas Structure and Suggestions of a Universal Density-Surface Brightness Relation** *ASTROPHYSICAL JOURNAL*
McClain, R. L., Leroy, A. K., Congiu, E., Barnes, A. T., Belfiore, F., Egorov, O., Emsellem, E., Rosolowsky, E., Amiri, A., Boquien, M., Chastenet, J., Chown, R., Dale, et al

2026; 998 (1)

- **Where Is the Supervirial Gas? III. Insights from X-Ray Shadow Observations and a Revised Model for the Soft Diffuse X-Ray Background** *ASTROPHYSICAL JOURNAL*
Gupta, A., Mathur, S., Kingsbury, J., Korkmaz, E., Das, S., Krongold, Y., Roy, M., Lara-DI, A.
2025; 989 (2)
- **Galaxies, clusters, and intergalactic medium: A vision document for the Indian Astronomical Community** *JOURNAL OF ASTROPHYSICS AND ASTRONOMY*
Kale, R., Muzahid, S., Khaire, V., Roy, N., Das, S., Chand, H., Chatterjee, S., Datta, A., Das, M., Hota, A., Jog, C. J., Kartha, S., Lal, et al
2025; 46 (2)
- **Where is the Supervirial Gas? II. Insight from the Survey of Galactic Sightlines** *ASTROPHYSICAL JOURNAL*
Roy, M., Mathur, S., Das, S., Lara-DI, A., Krongold, Y., Gupta, A.
2025; 982 (1)
- **Where is the supervirial hot gas? I: a pilot study with sightlines to Galactic X-ray binaries** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Lara-DI, A., Krongold, Y., Mathur, S., Roy, M., McClain, R. L., Das, S., Gupta, A.
2024; 533 (1): 287-291
- **A sub-solar Fe/O, $\log(\langle T/K \rangle)$ # 7.5 gas component permeating the Milky Way's CGM** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Lara-DI, A., Krongold, Y., Mathur, S., Das, S., Gupta, A., Montero, O.
2024; 531 (3): 3034-3041
- **Supervirial hot phase in Milky Way circumgalactic medium: further evidences** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
McClain, R. L., Mathur, S., Das, S., Krongold, Y., Gupta, A.
2023; 527 (3): 5093-5101
- **Probing the hot circumgalactic medium of external galaxies in X-ray absorption II: a luminous spiral galaxy at $\langle z \rangle \approx 0.225$** *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*
Mathur, S., Das, S., Gupta, A., Krongold, Y.
2023; 525 (1): L11-L16
- **The Hot Circumgalactic Medium of the Milky Way: New Insights from XMM-Newton Observations** *ASTROPHYSICAL JOURNAL*
Bhattacharyya, J., Das, S., Gupta, A., Mathur, S., Krongold, Y.
2023; 952 (1)
- **Thermal and chemical properties of the eROSITA bubbles from Suzaku observations** *NATURE ASTRONOMY*
Gupta, A., Mathur, S., Kingsbury, J., Das, S., Krongold, Y.
2023
- **Detection of a Supervirial Hot Component in the Milky Way Circumgalactic Medium Along Multiple Sight Lines by Using the Stacking Technique** *ASTROPHYSICAL JOURNAL*
Lara-DI, A., Mathur, S., Krongold, Y., Das, S., Gupta, A.
2023; 946 (1)