

## PUBLICATIONS

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### First author

- **Gazagnes S.**, Mauerhofer, V., Berg, D. A., Blaizot, J., Verhamme, A., Garel, T.; Erb, D. K., and the CLASSY Collaboration – 2023 – Interpreting the Si II and C II line spectra from the COS Legacy Spectroscopic Survey using a virtual galaxy from a high-resolution radiation-hydrodynamic simulation – *The Astrophysical Journal*.
- **Gazagnes S.**, Kalantar-Nayestanaki, N., Messchendorp, J. G., Regina, J., Stockmanns, T., Wilkinson, M. H. F. on behalf of the Panda Collaboration– 2023 – Reconstructing charged-particle trajectories in the PANDA Straw Tube Tracker using the LOcal Track Finder (LOTF) algorithm – *The European Physical Journal A*.
- **Gazagnes S.** and Wilkinson M. H. F. – 2022 – Parallel Attribute Computation for Distributed Component Forests – *IEEE International Conference on Image Processing (ICIP)*.
- **Gazagnes S.**, Koopmans L. V. E., and Wilkinson M. H. F. – 2021 – Inferring the astrophysics of reionization using the morphological spectra of the ionized regions – *MNRAS*, 502.
- **Gazagnes S.** and Wilkinson M. H. F. – 2021 – Distributed Connected Component Analysis and Filtering – *IEEE Transactions on Image Processing*, 30.
- **Gazagnes S.**, Chisholm J., Schaerer D., Verhamme A., and Izotov Y. – 2020 – The origin of the escape of Lyman  $\alpha$  and ionizing photons in Lyman continuum emitters – *A&A*, 639, A85.
- **Gazagnes S.** and Wilkinson M. H. F. – 2019 – Distributed component forests in 2D : hierarchical image representations for tera-scale images – *Int. Jour. of Pattern Recognition and Artificial Intelligence*, 33(11).
- **Gazagnes S.**, Chisholm J., Schaerer D., and 3 others – 2018 – Neutral gas properties of Lyman continuum emitting galaxies : Column densities and covering fractions from UV absorption lines – *A&A*, 616, A29.
- **Gazagnes S.**, Soubies E., & Blanc-Féraud L. – 2017 – High density molecule localization for super-resolution microscopy using CEL0 based sparse approximation. *Conference proceedings of the 14<sup>th</sup> IEEE Int. Symposium on Biomedical Imaging*.

### Co-authored

- Saldana-Lopez A., Schaerer D., and 25 others, including **Gazagnes S.** – 2022 – The Low-Redshift Lyman Continuum Survey : unveiling the ISM properties of low-z Lyman continuum emitters – *A&A*.
- Chisholm J., Prochaska X., Schaerer D., **Gazagnes S.**, Henry A. – 2020 – Optically thin spatially resolved Mg II emission maps the escape of ionizing photons – *MNRAS*, 498.
- Ghara R., Giri S.K., Mellema G., and 19 others, including **Gazagnes S.** – 2020 – Constraining the intergalactic medium at  $z \approx 9.1$  using LOFAR Epoch of Reionization observations – *MNRAS*, 493(4).
- Mertens F. G., Mevius M., Koopmans L. V. E., and 23 others, including **Gazagnes S.** – 2020 – Improved upper limits on the 21 cm signal power spectrum of neutral hydrogen at  $z \approx 9.1$  from LOFAR – *MNRAS*, 493(2).
- Chisholm J., **Gazagnes S.**, Schaerer D., and 6 others – 2018 – Accurately predicting the escape fraction of ionizing photons using rest-frame ultraviolet absorption lines – *A&A*, 616, A30.

## TALKS

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- **Conference talk** – *Interpreting UV spectra with RHD simulations* – UV galaxies, Reykjavik (Iceland) – July 2023.
- **Invited talk** – *Interpreting UV spectra with RHD simulations* – Fake Light workshop, Flatiron Institute, New York (USA) – June 2023.
- **Invited talk** – *Interpreting UV spectra with RHD simulations* – The James Webb Space Telescope turns one : the birth and growth of galaxies, Sesto (Italy) – March 2023.
- **Recorded talk** – *Parallel Attribute Computation for Distributed Component Forests* – IEEE International Conference on Image Processing (ICIP), Bordeaux (France) – October 2022.
- **Seminar** – *Interpreting UV spectra with RHD simulations* – Galaxy seminar, CRAL, Lyon (France) – July 2022.
- **Invited talk** – *Lyman- $\alpha$  properties in CLASSY* – Galaxy Evolution Workshop (online) – Jan 13<sup>th</sup> 2022

- › **Seminar** – *Exploring the Properties of the Reionization Sources With Low-z LCEs and High-z 21-cm Tomography* – Galaxy and cosmology seminar, UT Austin (USA) – Nov 1<sup>st</sup> 2021.
- › **Colloquium** – *Vast and Fast Data in the era of large astrophysics and particle physics experiments* – University of Groningen (The Netherlands) – Sep 23<sup>rd</sup>, 2021.
- › **Seminar** – *Distributed Connected Component Analysis and Filtering for Tera-Scale data sets* – Bernoulli Institute (The Netherlands) – May 28<sup>th</sup>, 2021.
- › **Contributed talk** – *Inferring the properties of the sources of reionization using the morphology of the ionized regions* – SAZERAC 21-cm sip (online) – Jan 29<sup>rd</sup> 2021
- › **Seminar** – *Exploring the properties of the reionization sources with spectroscopic and 21-cm observations* – CGI seminar at UC Santa Cruz (Stanford, USA) – Nov 23<sup>rd</sup> 2020.
- › **Seminar** – *Inferring the properties of the sources of reionization using the morphology of the ionized regions* – SKA EoR/CD SWG seminar (online) on Nov 12<sup>th</sup> 2020.
- › **Coffee talk** – *The origin of the escape of ionizing photons* – Flatiron Institute (New York, USA) on October 23<sup>rd</sup>, 2020.
- › **Colloquium** – *The origin of the escape of Lyman  $\alpha$  and ionizing photons* – Kapteyn Astronomical Institute (Groningen, The Netherlands) on July 20<sup>th</sup>, 2020.
- › **Contributed talk** – *The origin of the escape of Ly $\alpha$  and ionizing photons* – Conference EAS 2020, July 2020.
- › **Seminar talk** – *Bayesian inference with 21-cm tomography* – LOFAR EoR meeting, June 2020.
- › **Coffee talk** – *The origin of the escape of Lyman  $\alpha$  and ionizing photons* – Ohio State University Astro Coffee (Ohio, USA) on May 19<sup>th</sup>, 2020.
- › **Contributed talk** – *The morphology of the 21-cm brightness temperature during the EoR* – Conference EWASS 2019, June 2019.
- › **Poster presentation** – *The escape of ionizing photons in low redshift Lyman continuum emitters* – Conference EWASS 2019, June 2019.
- › **Seminar talk** – *The morphology of the 21-cm brightness temperature during the EoR* – LOFAR EoR plenary meeting on May 9<sup>th</sup>, 2019.
- › **Poster presentation** – *The evolution of the ionized gas during the early universe using DCFs* – DSSC Science meeting on April 25<sup>th</sup>, 2019.
- › **Poster presentation** – *Neutral gas properties of Lyman continuum emitters* – Conference Escape of Lyman radiation from galactic labyrinths, September 2018.
- › **Poster presentation** – *Neutral gas properties of Lyman continuum emitters* – Conference Rise and Shine, June 2018.