

Publications & Communications

Etienne Bonnassieux

1 First-Author Refereed Papers

- | | |
|----------|--|
| FEB 2022 | A&A : Spectral analysis of spatially-resolved 3C295 (sub-arcsecond resolution) with the International LOFAR Telescope (Bonnassieux et al. 2022) |
| NOV 2021 | Galaxies : Pilot Study and Early Results of the Cosmic Filaments and Magnetism Survey with Nenufar: The Coma Cluster Field (Bonnassieux et al. 2021) |
| MAY 2020 | A&A : Decoherence in LOFAR-VLBI beamforming (Bonnassieux et al. 2020) |
| JUL 2018 | A&A : The variance of radio interferometric calibration solutions. Quality-based weighting schemes (Bonnassieux et al. 2018) |

2 Other Refereed Papers

- | | |
|----------|---|
| JUN 2024 | A&A : A "MeerKAT-meets-LOFAR" study of the complex multi-component (mini-)halo in the extreme sloshing cluster Abell 2142 (Riseley et al. 2024) |
| MAY 2024 | ADASS XXXI : A distributed computing infrastructure for LOFAR Italian community (Taffoni et al. 2024) |
| OCT 2023 | MNRAS : A MeerKAT-meets-LOFAR study of Abell 1413: a moderately disturbed non-cool-core cluster hosting a 500 kpc 'mini'-halo (Riseley et al. 2023) |
| JAN 2023 | A&A : Deep low-frequency radio observations of Abell 2256. II. The ultra-steep spectrum radio halo (Rajpurohit et al. 2023) |
| SEP 2022 | MNRAS : Radio fossils, relics, and haloes in Abell 3266: cluster archaeology with ASKAP-EMU and the ATCA (Riseley et al. 2022a) |
| SEP 2022 | A&A : Diffuse radio emission from non-Planck galaxy clusters in the LoTSS-DR2 fields (Hoang et al. 2022) |
| JUL 2022 | ApJ : The Coma Cluster at LOFAR Frequencies. II. The Halo, Relic, and a New Accretion Relic (Bonafede et al. 2022) |
| JUL 2022 | A&A : Subarcsecond view on the high-redshift blazar GB 1508+5714 by the International LOFAR Telescope (Kappes et al. 2022) |

MAY 2022	MNRAS : A MeerKAT-meets-LOFAR study of MS 1455.0 + 2232: a 590 kiloparsec 'mini'-halo in a sloshing cool-core cluster (Riseley et al. 2022b)
MAY 2022	A&A : The galaxy group NGC 507: Newly detected AGN remnant plasma transported by sloshing (Brienza et al. 2022)
APR 2022	MNRAS : Spectral study of the diffuse synchrotron source in the galaxy cluster Abell 523 (Vacca et al. 2022)
MAR 2022	ApJ : Deep Low-frequency Radio Observations of A2256. I. The Filamentary Radio Relic (Rajpurohit et al. 2022b)
MAR 2022	A&A : The LOFAR Two-metre Sky Survey. V. Second data release (Shimwell et al. 2022)
FEB 2022	A&A : The resolved jet of 3C 273 at 150 MHz. Sub-arcsecond imaging with the LOFAR international baselines (Harwood et al. 2022)
FEB 2022	A&A : Sub-arcsecond imaging with the International LOFAR Telescope. I. Foundational calibration strategy and pipeline (Morabito et al. 2022)
JAN 2022	A&A : Turbulent magnetic fields in the merging galaxy cluster MACS J0717.5+3745 (Rajpurohit et al. 2022a)
OCT 2021	A&A : Dissecting nonthermal emission in the complex multiple-merger galaxy cluster Abell 2744: Radio and X-ray analysis (Rajpurohit et al. 2021b)
JUN 2021	A&A : Constraining the AGN duty cycle in the cool-core cluster MS 0735.6+7421 with LOFAR data (Biava et al. 2021)
FEB 2021	A&A : Physical insights from the spectrum of the radio halo in MACS J0717.5+3745 (Rajpurohit et al. 2021a)
FEB 2021	A&A : Understanding the radio relic emission in the galaxy cluster MACS J0717.5+3745: Spectral analysis (Rajpurohit et al. 2021c)
JAN 2021	ApJ : The Coma Cluster at LOw Frequency ARray Frequencies. I. Insights into Particle Acceleration Mechanisms in the Radio Bridge (Bonafede et al. 2021)
JUL 2021	A&A : LOFAR observations of galaxy clusters in HETDEX. Extraction and self-calibration of individual LOFAR targets (van Weeren et al. 2021)
NOV 2020	A&A : A perfect power-law spectrum even at the highest frequencies: The Toothbrush relic(Rajpurohit et al. 2020)
FEB 2019	A&A : The LOFAR Two-metre Sky Survey. II. First data release (Shimwell et al. 2019)

3 Non-refereed Papers

NOV 2023 | Arxiv : A Collection of German Science Interests in the Next Generation Very Large Array ([Kadler et al. 2023](#))

4 Posters

JUN 2017 | [Broad Impact of Low-Frequency Observing](#). Poster on quality-based weighting scheme.

5 Conferences & Workshops

AUG 2023 | [FRANCI meeting](#) in Bamberg. Presented an overview of the DFG project which I work on as part of my post-doctoral position, and for which I lead the LOFAR efforts.

JUN 2023 | [LOFAR Family Meeting](#) in Cologne. Gave a talk on the benefits of integrating NenuFAR as a superstation into the International LOFAR Telescope for the purposes of calibration and closure measurements, as well as the benefits of further extension of the ILT.

MAR 2021 | [6th LOFAR data school](#). Talk on direction-dependent calibration, organised hands-on workshop.

MAR 2021 | [RGCW Meeting](#). Gave talk on progress of NenuFAR Cosmic Filaments & Magnetic Fields Pilot Surveys.

APR 2018 | Invited lecturer at [the first Italian LOFAR School](#). Organised a hands-on workshop on direction-dependent calibration, and helped tutor in the workshops of colleagues.

SEP 2018 | [5th LOFAR data school](#). Talk on direction-dependent calibration, tutoring hands-on tutorial.

DEC 2017 | [SALF IV](#). Gave talk on quality-based weighting schemes.

OCT 2016 | [3GC4](#). Organised hands-on workshop on [using pyrap](#), a python wrapper for casacore. This allows scientists to interact with interferometric datasets in an efficient manner.

References

- Biava, N., Brienza, M., Bonafede, A., et al. 2021, A&A, 650, A170
- Bonafede, A., Brunetti, G., Rudnick, L., et al. 2022, ApJ, 933, 218
- Bonafede, A., Brunetti, G., Vazza, F., et al. 2021, ApJ, 907, 32
- Bonnassieux, E., Edge, A., Morabito, L., & Bonafede, A. 2020, A&A, 637, A51
- Bonnassieux, E., Sweijen, F., Brienza, M., et al. 2022, A&A, 658, A10
- Bonnassieux, E., Tasse, C., Smirnov, O., & Zarka, P. 2018, A&A, 615, A66
- Bonnassieux, E., Tremou, E., Girard, J. N., et al. 2021, Galaxies, 9, 105

Brienza, M., Lovisari, L., Rajpurohit, K., et al. 2022, A&A, 661, A92

Harwood, J. J., Mooney, S., Morabito, L. K., et al. 2022, A&A, 658, A8

Hoang, D. N., Brügggen, M., Botteon, A., et al. 2022, A&A, 665, A60

Kadler, M., Riechers, D. A., Agarwal, J., et al. 2023, arXiv e-prints, arXiv:2311.10056

Kappes, A., Burd, P. R., Kadler, M., et al. 2022, A&A, 663, A44

Morabito, L. K., Jackson, N. J., Mooney, S., et al. 2022, A&A, 658, A1

Rajpurohit, K., Brunetti, G., Bonafede, A., et al. 2021a, A&A, 646, A135

Rajpurohit, K., Hoeft, M., Wittor, D., et al. 2022a, A&A, 657, A2

Rajpurohit, K., Osinga, E., Brienza, M., et al. 2023, A&A, 669, A1

Rajpurohit, K., van Weeren, R. J., Hoeft, M., et al. 2022b, ApJ, 927, 80

Rajpurohit, K., Vazza, F., Hoeft, M., et al. 2020, A&A, 642, L13

Rajpurohit, K., Vazza, F., van Weeren, R. J., et al. 2021b, A&A, 654, A41

Rajpurohit, K., Wittor, D., van Weeren, R. J., et al. 2021c, A&A, 646, A56

Riseley, C. J., Biava, N., Luseti, G., et al. 2023, MNRAS, 524, 6052

Riseley, C. J., Bonafede, A., Bruno, L., et al. 2024, A&A, 686, A44

Riseley, C. J., Bonnassieux, E., Vernstrom, T., et al. 2022a, MNRAS, 515, 1871

Riseley, C. J., Rajpurohit, K., Loi, F., et al. 2022b, MNRAS, 512, 4210

Shimwell, T. W., Hardcastle, M. J., Tasse, C., et al. 2022, A&A, 659, A1

Shimwell, T. W., Tasse, C., Hardcastle, M. J., et al. 2019, A&A, 622, A1

Taffoni, G., Becciani, U., Bonafede, A., et al. 2024, in Astronomical Society of the Pacific Conference Series, Vol. 535, Astronomical Society of the Pacific Conference Series, ed. B. V. Hugo, R. Van Rooyen, & O. M. Smirnov, 397

Vacca, V., Shimwell, T., Perley, R. A., et al. 2022, MNRAS, 511, 3389

van Weeren, R. J., Shimwell, T. W., Botteon, A., et al. 2021, A&A, 651, A115