

Publications & Communications

Etienne Bonnassieux

1 First-Author Refereed Papers

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| 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

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| 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 Posters

JUN 2017	Broad Impact of Low-Frequency Observing . Poster on quality-based weighting scheme.
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4 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.
JAN 2022	ADASS XXXI: A distributed computing infrastructure for LOFAR Italian community (Taffoni et al. 2022). Conference paper for which I was a key scientific adviser for the collaboration.
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., Brüggén, M., Botteon, A., et al. 2022, A&A, 665, A60

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., 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. 2022, arXiv e-prints, arXiv:2201.11526
 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