

2018 - Refereed publications with the INAF-IRA radio telescopes

In the following list, refereed publications involving the Medicina and Noto 32-m radio telescopes have been divided in three categories according to the observing technique/telescope network: VLBI publications, Single-Dish publications and International VLBI Service for Geodesy and Astrometry (IVS) publications.

VLBI

- 1) Archer, A., Benbow, W., Bird, R., et al. 2018, ApJ 862, 41. "HESS J1943+213: An Extreme Blazar Shining through the Galactic Plane"
- 2) Bocanegra-Bahamón, T. M., Molera Calvés, G., Gurvits, L. I., et al. 2018, A&A 609, 59. "Planetary Radio Interferometry and Doppler Experiment (PRIDE) technique: A test case of the Mars Express Phobos Flyby II. Doppler tracking: Formulation of observed and computed values, and noise budget"
- 3) Bright, J. S., Fender, R. P., Motta, S. E., et al. 2018, MNRAS 475, 4011. "Long-term radio and X-ray evolution of the tidal disruption event ASASSN- 14li"
- 4) Gabányi, K. É., Frey, S. & An, T. 2018, A&A 612, A109. "Is 4C+29.48 a γ -ray source?"
- 5) Gabányi, K. É., Frey, S., Paragi, Z., et al. 2018, MNRAS 473, 1554. "The radio structure of the peculiar narrow-line Seyfert 1 galaxy candidate J1100+4421"
- 6) Gabányi, K. É., Frey, S., Gurvits, L. I., et al. 2018, RNAAS 2, 200. "High-resolution Radio Image of a Candidate Radio Galaxy at $z = 5.72$ "
- 7) Gawroński, M. P., Goździewski, K., Katarzyński, K., et al. 2018, MNRAS 475, 1399. "Another look at AM Herculis - radio-astrometric campaign with the e-EVN at 6 cm"
- 8) Giovannini, G., Savolainen, T., Orienti, M., et al. 2018, Nature Astronomy 2, 472. "A wide and collimated radio jet in 3C84 on the scale of a few hundred gravitational radii"
- 9) Guirado, J. C., Azulay, R., Gauza, B., et al. 2018, A&A 610, A23. "Radio emission in ultracool dwarfs: The nearby substellar triple system VHS 1256-1257"
- 10) Gupta, N., Srianand, R., Farnes, J. S., et al. 2018, MNRAS 476, 2432. "Revealing H I gas in emission and absorption on pc to kpc scales in a galaxy at $z \sim 0.017$ "
- 11) Kool, E. C., Ryder, S., Kankare, E., et al. 2018, MNRAS 473, 5641. "First results from GeMS/GSAOI for project SUNBIRD: Supernovae UNmasked By Infra-Red Detection"
- 12) Kutkin, A. M., Pashchenko, I. N., Lisakov, M. M., et al. 2018, MNRAS 475, 4994. "The extreme blazar AO 0235+164 as seen by extensive ground and space radio observations"

- 13) Malkin, Z. 2018, ApJS 239, 20. "A New Version of the OCARS Catalog of Optical Characteristics of Astrometric Radio Sources"
- 14) Mattila, S., Pérez-Torres, M., Efstathiou, A., et al. 2018, Science 361, 482. "A dust-enshrouded tidal disruption event with a resolved radio jet in a galaxy merger"
- 15) Michałowski, M., Xu, D., Stevens, J., et al. 2018, A&A 616, A169. "The second-closest gamma-ray burst: sub-luminous GRB 111005A with no supernova in a super-solar metallicity environment"
- 16) Moscadelli, L., Rivilla, V. M., Cesaroni, R., et al. 2018, A&A 616, A66. "The feedback of an HC HII region on its parental molecular core. The case of core A1 in the star-forming region G24.78+0.08"
- 17) Nikiforov, I. I. & Veselova, A. V. 2018 Astronomy Letters 44, 81. "Geometric Aspects and Testing of the Galactic Center Distance Determination from Spiral Arm Segments"
- 18) Perger, K., Frey, S., Gabányi, K. É., et al. 2018, MNRAS 477, 1065. "Constraining the radio jet proper motion of the high-redshift quasar J2134-0419 at $z = 4.3$ "
- 19) Pilipenko, S. V., Kovalev, Y. Y., Andrianov, A. S., et al. 2018, MNRAS 474, 3523. "The high brightness temperature of B0529+483 revealed by RadioAstron and implications for interstellar scattering"
- 20) Radcliffe, J. F., Garrett, M. A., Muxlow, T. W. B., et al. 2018, A&A 619, A48. "Nowhere to Hide: Radio-faint AGN in GOODS-N field. I. Initial catalogue and radio properties "
- 21) Rampadarath, H., Soria, R., Urquhart, R., et al. 2018, MNRAS 476, 2876. "Jets, arcs, and shocks: NGC 5195 at radio wavelengths"
- 22) Runnoe, J. C., Gültekin, K. & Rupke, D. S. N. 2018, ApJ 852, 8. "Does the Compact Radio Jet in PG 1700+518 Drive a Molecular Outflow?"
- 23) Schulz, R., Morganti, R., Nyland, K., et al. 2018, A&A 617, A38. "Mapping the neutral atomic hydrogen gas outflow in the restarted radio galaxy 3C 236"
- 24) Shao, C.-G., Chen, Y.-F., Sun, R., et al. 2018, Physical Review D 97, id.024019. "Limits on Lorentz violation in gravity from worldwide superconducting gravimeters"
- 25) Spingola, C., McKean, J. P., Auger, M. W., et al. 2018, MNRAS 478, 4816. "SHARP - V. Modelling gravitationally lensed radio arcs imaged with global VLBI observations"
- 26) Sobolev, A. M., Moran, J. M., Gray, M. D., et al. 2018, ApJ 856, 60. "Sun-sized Water Vapor Masers in Cepheus A"
- 27) Sun, X-N., Yang, R-Z., Rieger, F. M. et al. 2018, A&A, 612, A106. "Energy distribution of relativistic electrons in the kiloparsec scale jet of M 87 with Chandra"
- 28) Szymczak, M., Olech, M., Wolak, P., et al. 2018, A&A 617, A80. "Giant burst of methanol maser in S255IR-NIRS3"

- 29) Titov, O. & Krásná, H. 2018, A&A 610, A36. "Measurement of the solar system acceleration using the Earth scale factor"
- 30) Voitsik, P. A., Pushkarev, A. B., Kovalev, Y., et al. 2018, Astronomy Reports 62, 787. "Frequency-Dependent Core Shifts in Ultracompact Quasars"
- 31) Wenger, T. V., Balser, D. S., Anderson, L. D., et al. 2018 ApJ 856, 52. "Kinematic Distances: A Monte Carlo Method"
- 32) Xu, Y., Hou, L.-G. & Wu, Y.-W. 2018, RAA 18, 146. "The spiral structure of the Milky Way"
- 33) Zakhvatkin, M. V., Andrianov, A. S., Avdeev, V. Y., et al. 2018, Advances in Space Research 65, 798. "RadioAstron orbit determination and evaluation of its results using correlation of Space-VLBI observations"

Single-Dish

- 1) Cosmovici, C.B. & Pogrebenko, S. 2018, Int. J. of Astrobiology. "Water maser emission from exoplanetary systems"
- 2) Lekht E.E., Pashchenko M.I., Rudnitskii G.M., et al. 2018, Astron. Rep. 62, 213. "Superflares of H₂O Maser Emission Toward the Protostellar Object G25.65+1.05 (IRAS 18316-0602)"
- 3) Larsson J., D'Ammando F., Falocco S., et al. 2018, MNRAS 476, 43. "FBQS J1644+2619: multiwavelength properties and its place in the class of γ -ray emitting Narrow Line Seyfert 1s"
- 4) Wu, L., Wu, Q., Yan, D., et al. 2018, ApJ 852, 45. "Constraints on the Location of γ -Ray Sample of Blazars with Radio Core-shift Measurements"

IVS

- 1) Balidakis, K., Nilsson, T., Zus, F., et al. 2018, J. Geophys. Res. - Atmospheres 123, 6356. "Estimating integrated water vapor trends from VLBI, GPS, and numerical weather models: Sensitivity to tropospheric parameterization"
- 2) Cui, X., Sun, H., Xu, J., et al. 2018, Earth Planets Space 70, 199. "Detection of free core nutation resonance variation in Earth tide from global superconducting gravimeter observations"
- 3) Frouard, J., Johnson, M. C., Fey, A., et al. 2018, AJ 229, 6, 155, id. 229. "Toward the ICRF3: Astrometric Comparison of the USNO 2016A VLBI Solution with ICRF2 and Gaia DR1"
- 4) Kwak, Y., Bloßfeld, M., Schmid, R., et al. 2018, J. Geod. 92, 1047. "Consistent realization of Celestial and Terrestrial Reference Frames"
- 5) Landskron, D. & Böhm, J. 2018, J. Geod. 92, 1387. "Refined discrete and empirical horizontal gradients in VLBI analysis"
- 6) Lian, L., Wang, J., & Huang, C. 2018, Geodesy and Geodynamics 10, 130. "Analysis and

combination of four technique-individual EOP time series”

7) Liu, N., Lambert, S. B. & Zhu, Z. 2018, A&A 620, 160. “Determining the accuracy of VLBI radio source catalogs”

8) Nikolaidou, T., Balidakis, K., Nievinski, F., et al. 2018, Earth Planets Space 70, 95. “Impact of different NWM-derived mapping functions on VLBI and GPS analysis”

9) Nothnagel A. 2018, In: Freeden W., Rummel R. (eds) Handbuch der Geodäsie. Springer Reference Naturwissenschaften. Springer Spektrum, Berlin, Heidelberg. “Very Long Baseline Interferometry”

10) Soja, B., Gross, R. S., Abbondanza, C., et al. 2018, Advances in Space Research 61, 2418. “Application of time-variable process noise in terrestrial reference frames determined from VLBI data”

11) Titov, O. & Krásná, H. 2018, A&A 610, 36. “Measurement of the solar system acceleration using the Earth scale factor”