

IAU-URSI Working Group Historical Radio Astronomy

**Report to Commission J
URSI General Assembly
1 September, 2021**

**Richard Schilizzi, Univ. Manchester
Leonid Gurvits, JIV-ERIC
Ken Kellermann, NRAO
Tim Robishaw (DRAO)
Richard Wielebinski, MPIfR**

WG HRA first established in 2003 in the IAU, but since 2014 is a joint WG with URSI

1. Maintain an on-going bibliography of publications on the history of radio astronomy;
2. Commission and maintain online publication of biographical memoirs for deceased radio astronomers;
3. Encourage research relating to the history of radio astronomy, including the origins and development of current and past large facilities.

All documented on the WG website <https://rahist.nrao.edu>

Publications (2017-2021)

Year	Journals	Books	PhD theses
2017	11	4	1
2018	9	2	
2019	10	2	
2020	6	1	
2021			1
1958-2020	286		
1963-2020		43	
2008-2021			4

Conferences (2017-2021)

- 2017 The history of large radio interferometer projects and lessons learned, *URSI GASS*, Montreal (11 talks)
- 2018 The history of large single dish projects and lessons learned, *IAU GA*, Vienna (8 talks)
- Jas Fest: A Celebration of Jasper Wall at 75, Univ British Columbia, Vancouver (25 talks)
- 2019 The History of the Square Kilometre Array, 1980s-2012, *SKAO*, Jodrell Bank (49 presentations and 7 discussion sessions)
- 2021 The impact of radio astronomy on technology and society, *URSI GASS 2021*, session J09, 2 September, 13.50-16.00 (5 talks)

Biographical Memoirs 2017-2021

Wilhelm Altenhoff (2017)	Jet Katgert (2020)	John Sieradakis (2020)
Bryan Anderson (2020)	Pierre Kaufmann (2017)	Sue Simkin (2021)
Bernie Burke (2018)	Adair Lane (2017)	Lew Snyder (2021)
Diego Cesarsky (2021)	Ed Lilley (2020)	Roman Sorochenko (2017)
Nichi D'Amico (2020)	Roger Linfield (2020)	Govind Swarup (2020)
Ger de Bruyn (2017)	Jean-Pierre MacQuart (2020)	George Swenson (2017)
Bill Dent (2020)	Leonid Matveyenko (2019)	Yervant Terzian (2019)
Boris Dubinsky (2019)	Nguyen Quang Rieu (2021)	Pat Thaddeus (2017)
Paul Feldman (2020)	Kartarzyna Otmianowska-Mazur (2020)	Hugo van Woerden (2020)
Dick Hunstead (2020)	Eugen Preuss (2017)	Mario Vigotti (2021)
May Arif Kaftan-Kassim (2020)	Lee J. Rickard (2017)	Malcolm Walmsley (2017)
Nikolai Kardashev (2019)	Kristen Rohlfs (2017)	Harold Weaver (2017)

WG HRA Web site

<http://rahist.nrao.edu/>

- Membership
- Working Group Meetings and Reports
- Grote Reber Medalists
- Biographical Memoirs
- Resources – History of Radio Astronomy
 - Publications
 - Archives including URSI Commission 5/J and IAU Commission 40/B4 triennial reports
 - Individual astronomers
 - Workshops
 - Early radio astronomy courses
 - Recognised historic radio telescopes

Recognised Historic Radio Telescopes

- Bell Labs 20-foot horn antenna (1989, USA)
- Reber 11m (1990, USA)
- Stockert 25m (1999, Germany)
- Dwingeloo 25 m (2007, NL)
- Arecibo (2008, Puerto Rico)
- Jodrell Bank Observatory (2019, UK)
- 6 m Millimeter Radio Telescope (2019, Japan)
- Parkes 64 m (2020, Australia)

WG Officers

	2017-2021	2021-2024
Chair	Richard Schilizzi (UManchester)	Leonid Gurvits (JIV-ERIC)
Vice Chair	Leonid Gurvits	Tim Robishaw (DRAO)
Secretary	Ken Kellermann (NRAO)	Ken Kellermann
Past Chair	Richard Wielebinski (MPIfR)	Richard Schilizzi
Web Manager	Ellen Bouton (NRAO)	Ellen Bouton

Current WG membership: 46

- Includes 14 “national reporters” responsible for keeping track of developments of relevance to the WG in their respective countries or regions

The WG is completely open for anyone to join

Current and Future Activities

- Research → journal publications, books, PhD theses
- Maintenance and further development of the HRA WG
Web site <http://rahist.nrao.edu/>
- “Gone but not forgotten radio telescopes”
 - a list of other “gone but not forgotten” radio telescopes that have not had formal national or international recognition. These are defined as telescopes that no longer exist or are no longer in use for radio astronomy.
- Conference: **URSI GA August 2021, session J09**
- 10 books in press or in preparation

Books in press or in preparation

- 1) “History of the Arecibo Observatory” [Campbell D.](#)
- 2) “From the Sun to the Cosmos, J. L. Pawsey” [Goss, W.M., Ekers, R.D., and Hooker, C.](#) (in press, Springer, Open Access)
- 3) “Why don't you build a radio telescope?: 40 years of Radio Astronomy in Bologna” [Gregorini, L., Feretti, L., Giovannini, G., Mantovani, F., Parma, P., and Vettolani, G](#) (in press, Bologna University Press). English translation in preparation.
- 4) “Space VLBI – Radio telescopes Larger than the Earth” [Gurvits, L.I., Hirabayashi, H. and Schilizzi, R.T](#)(to be published by Springer)
- 5) “Star Noise: Discovering the Radio Universe” [Kellermann, K.I. and Bouton, E.N.](#) (to be published by CUP)
- 6) “The Square Kilometre Array: a science mega-project in the making, 1993-2012” [Schilizzi, R.T., Ekers, R.D., Crosby, P., and Dewdney, P.E.D.](#)“ (to be published by Springer, Open Access)
- 7) “History of the Max Planck Institute for Radio astronomy” [Schwartz, R. and Zensus, J.A](#) (English translation)
- 8) “The ALMA Radio Telescope - Birth Pangs of a Megaproject” [Vanden Bout, P. and Dickman, R.](#)
- 9) “A Young Science in a Young Country: The Origins and History of Canadian Radio Astronomy” [Wall, J.V., Griffin, E., and Jarrell, R.](#) (to be published by Springer)
- 10) “The Golden Years of Australian Radio Astronomy – An Illustrated History ” [Orchiston, W., Robertson, P., and Sullivan, W.](#)