

List of publications : — Avinash A. Deshpande

Papers in *refereed journals*

(1) **Observations of the Rosette nebula using the decameter-wave radio-telescope at Gauribidanur**

Deshpande, A. A., Shevgaonkar, R. K., and Sastry, Ch. V. 1984, *Astrophys. and Space Sci.*, **102**, 21.

(2) **Observations of the giant HII region complex W51 at decametric wavelengths**

Deshpande, A. A., and Sastry, Ch. V. 1986, *Astron. Astrophys.*, **160**, 129.

(3) **Why the Barker sequence bit length does not exceed thirteen ?**

Rao, B. V., and Deshpande, A. A. 1988, *Journal of IETE (lett.)*, **34(6)**, 461.

(4) **Statistics of refractive pulsar scintillation: Effect of limited data length**

Deshpande, A. A., and Nityananda, R. 1990, *Astron. Astrophys.*, **231**, 199.

(5) **The Decameter-wave Radio-telescope at Gauribidanur: Antenna arrays and Control system**

Deshpande, A. A., Shevgaonkar, R. K., and Sastry, Ch. V. 1990, *Journal of IETE* , **35(6)**, 342.

(6) **A modified Algorithm for CLEANing Wide-Field Maps with Extended Structures**

Dwarkanath, K. S., Deshpande, A. A., and Udaya Shankar, N. 1990, *J. Astrophys. Astr.*, **11**, 311.

(7) **Pulsar Observations at 34.5 MHz using the Gauribidanur Telescope:I**

Deshpande, A. A., and Radhakrishnan, V. 1992, *J. Astrophys. Astr.*, **13**, 151.

(8) **A Sweeping Local Oscillator System for Pulsar Observations**

Deshpande, A. A. 1992, *J. Astrophys. Astr.*, **13**, 167.

(9) **Pulsar Observations and Small-scale Structure in the Interstellar HI**

Deshpande, A. A., McCulloch, P. M., Radhakrishnan, V., and Anantharamaiah, K. R. 1992, *Mon. Not. R. astr. Soc.*, **258**, 19p.

(10) **The spatial Distribution of Pulsars and the Spiral Structure of the Galaxy**

Ramachandran, R. and Deshpande, A. A. 1994, *J. Astrophys. Astr.*, **15**, 69.

(11) **Pulsar Observations at Decametric Wavelengths using a Swept-frequency Dedisperser**

Deshpande, A. A., and Radhakrishnan, V. 1994, *J. Astrophys. Astr.*, **15**, 329.

(12) **The Timing Noise of 45 Southern Pulsars**

D'Alessandro, F., McCulloch, P. M., Hamilton, P. A., and Deshpande, A. A., 1995, *Mon. Not. R. astr. Soc.*, **277**, 1033.

(13) **Are Many Pulsars Processed in Binary Systems ?**

Deshpande, A. A., Ramachandran, R., and Srinivasan, G. 1995, *J. Astrophys. Astr.*, **16**, 53.

(14) **Application of 'CLEAN' in the Power Spectral Analysis of Non-Uniformly Sampled Pulsar Timing Data**

Deshpande, A. A., D'Alessandro, F., and McCulloch, P. M. 1996, *J. Astrophys. Astr.*, **17**, 7.

(15) **A Survey of the Galactic Plane for 6.7-GHz Methanol Masers I: $l = 325$ to 335° ; $b = -0.53$ to 0.53°**

Ellingsen, S. P., von Bibra, M. L., McCulloch, P. M., Norris, R. P., Deshpande, A. A., and Phillips, C. J. 1996, *Mon. Not. R. astr. Soc.*, **280**, 378.

- (16) **New HI Absorption Measurements towards Six Pulsars**
Saravanan, T. P., Deshpande, A. A., Wilson, W., Davies, E., McCulloch, P. M., and McConnell, D. 1996, *Mon. Not. R. astr. Soc.*, **280**, 1027.
- (17) **Coherent Radiation Pattern suggested by Single-pulse Observations of a Millisecond Pulsar**
Ables, J. G., McConnell, D., Deshpande, A. A., and Vivekanand, M. 1997, *Ap. J. Lett.*, **475**, L33.
- (18) **Power Spectral Analysis of the Timing Noise in 18 Southern Pulsars**
D'Alessandro, F., Deshpande, A. A., and McCulloch, P. M. 1997, *J. Astrophys. Astr.*, **18**, 5.
- (19) **Measurement of scatter broadening for 27 pulsars at 327 MHz**
Ramachandran, R., Mitra, D., Deshpande, A. A., McConnell, D. M., and Ables, J. G. 1997, *Mon. Not. R. astr. Soc.*, bf 290, 260.
- (20) **New Timing Parameters and Positions for 16 Southern Radio Pulsars**
Indrani, C., Deshpande, A. A., and Balasubramanian, V. 1998, *Mon. Not. R. astr. Soc.*, **295**, 397.
- (21) **Improving Pulsar Distances by Modelling Interstellar Scattering**
Deshpande, A. A. and Ramachandran, R. 1998, *Mon. Not. R. astr. Soc.*, **300**, 577.
- (22) **Upper Limits on the Pulsed Radio Emission from the Geminga Pulsar at 35 & 327 MHz**
Ramachandran, R., Deshpande, A. A. and Indrani, C. 1998, *Astronomy & Astrophysics*, **339**, 787.
- (23) **Large Scale Structure of the Magnetic Field in Our Galaxy**
Indrani, C., and Deshpande, A. A., 1998, *New Astronomy*, **4**(1), 33.
- (24) **Revisiting the Shapes of Pulsar Beams**
Mitra, D. and Deshpande, A. A., 1999, *Astronomy & Astrophysics*, **346**, 906.
- (25) **Determination of Linear Polarization and Faraday Rotation of Pulsar Signals from Spectral Intensity Modulation**
Ramkumar, P. S., and Deshpande, A. A., 1999, *J. Astrophys. Astr.*, **20**, 37.
- (26) **Pulsar Magnetospheric Emission Mapping: Images and Implications of Polar-Cap Weather**
Deshpande, A. A., and Rankin, J. M., 1999, *Astrophysical Journal*, **524**, 1008.
- (27) **The observational evidence pertinent to possible kick mechanisms in neutron stars**
Deshpande, A. A., Ramachandran, R., and Radhakrishnan, V., 1999, *Astronomy & Astrophysics*, **351**, 195.
- (28) **The small-scale structure in interstellar HI: A resolvable puzzle**
Deshpande, A. A., 2000, *Mon. Not. R. astr. Soc.*, **317**, 199.
- (29) **Power Spectrum of the Density of Cold Atomic Gas in the Galaxy toward Cassiopeia A and Cygnus A**
Deshpande, A. A., Dwarkanath, K. S., and Goss, W. M., 2000, *Astrophysical Journal*, **543**, 227.
- (30) **Search for discrete refractive scattering events**
Ramachandran, R., Deshpande, A. A., and Stappers, B. W., 2000, *Astronomy & Astrophysics*, **364**, 71.
- (31) **Upper Limits on Periodic, Pulsed Radio Emission from the X-Ray Point Source in Cassiopeia A**
McLaughlin, M. A., Cordes, J. M., Deshpande, A. A., Gaensler, B. M., Hankins, T. H., Kaspi,

- V. M., and Kern, J. S., 2001, *Astrophysical Journal*, **547**, 41.
- (32) **The topology and polarization of sub-beams associated with the 'drifting' sub-pulse emission of pulsar B0943 + 10 - I. Analysis of Arecibo 430- and 111-MHz observations**
 Deshpande, A. A., and Rankin, J. M., 2001, *Mon. Not. R. astr. Soc.*, **322**, 438.
- (33) **Topology and polarisation of subbeams associated with pulsar B0943+10's "drifting"-subpulse emission - II. Analysis of Gauribidanur 35-MHz observations**
 Asgekar, A., and Deshpande, A. A., 2001, *Mon. Not. R. astr. Soc.*, **326**, 1249.
- (34) **Vela, its X-ray nebula, and the polarization of pulsar radiation**
 Radhakrishnan, V., and Deshpande, A. A., 2001, *Astronomy & Astrophysics*, **379**, 551.
- (35) **Real-Time Signal Processor for Pulsar Studies**
 Ramkumar, P. S., and Deshpande, A. A., 2001, *J. Astrophys. Astr.*, **22**, 321.
- (36) **Topology and polarisation of subbeams associated with pulsar B0943+10's "drifting"-subpulse emission - III. Analysis of Pushchino 103/40-MHz observations**
 Rankin, J. M., Suleymanova, S. A., and Deshpande, A. A., 2003, *Mon. Not. R. astr. Soc.*, 340, 1076.
- (37) **The radio nebula surrounding the Vela pulsar**
 Dodson, R., Lewis, D., McConnell, D., and Deshpande, A. A. 2003, *Mon. Not. R. astr. Soc.*, 343, 116.
- (38) **The luminosity distribution of pulsars in 47 Tucanae**
 McConnell, D., Deshpande, A. A., Ables, J. G., and Connors, T. 2004, *Mon. Not. R. astr. Soc.*, 348, 1409.
- (39) **Contaminants in ATCA baselines with shadowing: a case study of cross-talk in short-spacing interferometers**
 Subrahmanyam, R., and Deshpande, A. A., 2004, *Mon. Not. R. astr. Soc.*, 349, 1365.
- (40) **Fluctuation properties and polar emission mapping of pulsar B0834+06 at decimeter wavelengths**
 Asgekar, A., and Deshpande, A. A. 2005, *Mon. Not. R. astr. Soc.*, 357, 1105.
- (41) **Correlations of Spectral Intensity Fluctuations: Application to RFI mitigation**
 Deshpande, A. A. 2005, *Radio Science*, 40, RS5S12
- (42) **Arecibo Pulsar Survey Using ALFA. I. Survey Strategy and First Discoveries**
 Cordes, J. M., et al. (with 23 co-authors) 2006, *Astrophysical Journal*, 637, 446.
- (43) **Arecibo Pulsar Survey Using ALFA. II. The Young, Highly Relativistic Binary Pulsar J1906+0746**
 Lorimer, D. R., et al. (with 35 co-authors) 2006, *Astrophysical Journal*, 640, 428.
- (44) **Instantaneous Radio Spectra of Giant Pulses from the Crab Pulsar from Decimeter to Decimeter Wavelengths**
 Popov, M. V., Kuzmin, A. D., Ul'yanov, O. M., Deshpande, A. A., Ershov, A. A., Zakharenko, V. V., Kondratiev, V. I., Kostyuk, S. V., Losovskii, B. Ya., and Soglasnov, V. A. 2006, *Astron. Rep.*, 50, 562
- (45) **HI Density Distribution Driven by Supernova Ejecta: A Simulation Study**
 Hodge, J. A., and Deshpande, A. A. 2006, *Astrophysical Journal*, 646, 232
- (46) **Intrinsic Short time Scale Variability in W3(OH) Hydroxyl Masers**
 Ramachandran, R., Deshpande, A. A., and Goss, W. M. 2006, *Astrophysical Journal*, 653, 1314.
- (47) **Low-Noise 6-8 GHz Receiver**
 Pandian, J. D., Baker, L., Cortes, G., Goldsmith, P. F., Deshpande, A. A., Ganesan, R., Hagen,

- J., Locke, L., Wadefalk, N., and Weinreb, S. 2006, *IEEE Microwave Magazine*, 7(6), 74
- (48) **The Arecibo Methanol Maser Galactic Plane Survey - I: Data**
Pandian, J. D., Goldsmith, P. F. and Deshpande, A. A. 2007, *Astrophysical Journal*, 656, 255.
- (49) **Further Evidence for Collimated Particle Beams from Pulsars, and Precession**
Deshpande, A. A., and Radhakrishnan, V. 2007, *Astrophysical Journal*, 656, 1038.
- (50) **Two-Frequency Observations of Six Pulsars Using UTR-2 and GEETEE Radio Telescopes**
Ulyanov, O. M., Deshpande, A. A., Zakharenko, V. V. and Asgekar, A. 2007, *Radio Physics and Radio Astronomy*, **12(1)**, 5.
- (51) **A Search for 6.7 GHz Methanol Masers in M33**
Goldsmith, P. F., Pandian, J. D. and Deshpande, A. A. 2008, *Astrophysical Journal*, 680, 1132.
- (52) **The Murchison Widefield Array: Design Overview**
Lonsdale, C. J., et al. (with 57 co-authors) 2009, *Proc. of the IEEE*, **97(8)**, 1497.
- (53) **Interferometric imaging with the 32 element Murchison Wide-field Array**
Ord, S. M., et al. (with 58 co-authors) 2010, *PASP*, **122(897)**, 1353.
- (54) **Single-pulse analysis of PSR B1133+16 at 8.35 GHz and carousel circulation time**
Honnappa, S., Lewandowski, W., Kijak, J., Deshpande, A. A., Gil, J., Maron, O., Jessner, A. 2012, *Mon. Not. R. astr. Soc.*, **421**, 1996.
- (55) **Comment on “Classical Langevin dynamics of a charged particle moving on a sphere and diamagnetism: A surprise” by Kumar N. and Kumar K. Vijay**
Deshpande, A. A., Vijay Kumar, V., Kumar, N. 2012, *EPL*, **97**, 17003.
- (56) **Light scattering from a magnetically tunable dense random medium with dissipation: ferrofluid**
Shalini, M., Sharma, D., Deshpande, A. A., Mathur, D., Ramachandran, H., Kumar, N. 2012, *The European Physical Journal D*, **66**, 1.
- (57) **Low-frequency Imaging of Fields at High Galactic Latitude with the Murchison Widefield Array 32 Element Prototype**
Williams, C. L., et al. (with 54 co-authors) 2012, *Astrophysical Journal*, **755**, 47.
- (58) **Pulsed radio emission from the Fermi-LAT pulsar J1732-3131: search and a possible detection at 34.5 MHz**
Maan, Y., Aswathappa, H.A., Deshpande, A. A., 2012, *Mon. Not. R. astr. Soc.*, **425(1)**, 2.
- (59) **The Murchison Widefield Array: the Square Kilometre Array Precursor at low radio frequencies**
Tingay, S. J., et al. (with 60 co-authors) 2013, *PASA*, **30**, e007.
- (60) **RRI-GBT Multi-Band Receiver: Motivation, Design & Development**
Maan, Y., Deshpande, A. A., Vinutha, C., et al. (with 32 co-authors) 2013, *Astrophysical Journal Supp. Ser.*, **204**, 12.
- (61) **Science with the Murchison Widefield Array**
Bowman, J. D., et al. (with 60 co-authors) 2013, *PASA*, **30**, e031.
- (62) **OH Maser Sources in W49N: Probing magnetic field and differential anisotropic scattering with Zeeman pairs using the Very Long Baseline Array**
Deshpande, A. A., Goss, M. W., and Mendoza-Torres, J. E. 2013, *Astrophysical Journal*, **775**, 36.
- (63) **Inter-relationship between the Two Emission Cones of B1237+25**
Yogesh Maan and Deshpande, A. A. 2014, *Astrophysical Journal*, **792**, 130.

- (64) **Study of Redshifted H I from the Epoch of Reionization with Drift Scan**
Paul, S., et al. (with 39 co-authors) 2014, *Astrophysical Journal*, **793**, 28.
- (65) **A survey for transients and variables with the Murchison Widefield Array 32-tile prototype at 154 MHz**
Bell, M. E., et al. (with 57 co-authors) 2014, *Mon. Not. R. astr. Soc.*, **438**, 352.
- (66) **The low-frequency characteristics of PSR J0437-4715 observed with the Murchison Widefield Array**
Bhat, N. D. R., et al. (with 39 co-authors) 2014, *Astrophysical Journal Letters*, **791**, 32.
- (67) **The Murchison Widefield Array Commissioning Survey: A Low-Frequency Catalogue of 14110 Compact Radio Sources over 6100 Square Degrees**
Hurley-Walker, N., et al. (with 52 co-authors) 2014, *PASP*, **31**, 45.
- (68) **A digital-receiver for the Murchison Widefield Array**
Prabu, T., et al. (with 57 co-authors) 2015, *Experimental Astronomy*, **39**, 73.
- (69) **Simultaneous Observations of Giant Pulses from the Crab Pulsar, with the Murchison Widefield Array and Parkes Radio Telescope: Implications for the Giant Pulse Emission Mechanism**
Oronsaye, S. I., et al. (with 30 co-authors) 2015, *Astrophysical Journal*, **809**, 51.
- (70) **The High Time and Frequency Resolution Capabilities of the Murchison Widefield Array**
Tremblay, S. E., et al. (with 39 co-authors) 2015, *PASP*, **32**, 5.
- (71) **The Murchison Widefield Array Correlator**
Ord, S. M., et al. (with 66 co-authors) 2015, *PASP*, **32**, 6.
- (72) **Fast Transients with the Square Kilometre Array and its Pathfinders: An Indian Perspective**
Gupta, Y., Chandra, P., Bagchi, M., Ramanujam, N. M., Maan, Y., Deshpande, A. A., and Bhattacharyya, S. 2016, *J. Astrophys. Astr.*, **37**, 37.
- (73) **Low-frequency Observations of the Subpulse Drifter PSR J0034-0721 with the Murchison Widefield Array**
McSweeney, S. J., Bhat, N. D. R., Tremblay, S. E., Deshpande, A. A., and Ord, S. M. 2017 *Astrophysical Journal*, **836**, 224.
- (74) **Classical orbital paramagnetism in non-equilibrium steady state**
Deshpande, A. A., and Kumar, N. 2017, *J. Astrophys. Astr.*, **38**, 57.
- (75) **Scintillation based search for off-pulse radio emission from pulsars**
Ravi, K., and Deshpande, A. A. 2018, *Astrophysical Journal*, **859**, 22.
- (76) **Dipole Anisotropy as an Essential Qualifier for the Monopole Component of the Cosmic-dawn Spectral Signature, and the Potential of Diurnal Pattern for Foreground Estimation**
Deshpande, A. A. 2018, *Astrophysical Journal Letters*, **866**, L7.
- (77) **The Murchison Widefield Array Transients Survey (MWATS). A search for low-frequency variability in a bright Southern hemisphere sample**
Bell, M. E., et al. (with 40 co-authors) 2018 *Mon. Not. R. astr. Soc.*, **482**, 2484.
- (78) **On the Geometry of Curvature Radiation and Implications for Subpulse Drifting**
McSweeney, S. J., Bhat, N. D. R., Tremblay, S. E., Deshpande, A. A., and Wright, G. 2019 *Astrophysical Journal*, **870**, 48.
- (79) **The dynamic spectral signatures from Lunar Occultation: A simulation study**

Patel, J. V., and Deshpande, A. A. 2019, *J. Astrophys. Astr.*, **40**, 3.

(80) Iridium Satellite Signals : A Case Study in Interference Characterization and Mitigation for Radio Astronomy Observations

Deshpande, A. A., and Lewis, B. M. 2019, *J. Astro. Instr.*, **8(1)**, 1940009.

(81) A minimal space interferometer configuration for imaging at low radio frequencies

Jaini, A., Deshpande, A. A., and Bitragunta, S. 2021, *PASA*, **38**, e040.

(82) A Comparison of Multi-Phase Magnetic Field Tracers in a High-Galactic Latitude Region of the Filamentary Interstellar Medium

Campbell, J. L., SE Clark, S. E., Gaensler, B. M., Marchal, A., Van Eck, C. L., Deshpande, A. A., George, S. J., Gibson, S. J., Ricci, R., Stil, J. M., Taylor, A. R. 2022, *ApJ*, **927(1)**, 49.

(83) Image plane detection of FRB121102 with the MeerKAT radio telescope

Andrianjafy, J. C., Heeralall-Issur, N., Deshpande, A. A., Golap, K., Woudt, P., Caleb, M., Barr, E. D., Chen, W., Jankowski, F., Kramer, M., Stappers, B. W., Wu, J. 2023, *MNRAS*, **518 (3)**, 3462.

Papers in long.....delay-line before publication in refereed journals

(84) Resolution of Identity Crisis of Events in Pile-up

Deshpande, A. A., and Raichur, H. (arXiv:1206.6181)

(85) On the Ordinary Characteristics of the Medium Responsible for the Extreme Scattering Events

Deshpande, A. A., and Radhakrishnan, V.

(86) Dynamics of stellar wind in a Roche potential: implications for (i) outflows & periodicities relevant to astronomical masers, and (ii) generation of baroclinicity

Singh, N. K., and Deshpande, A. A. (arXiv:1503.05596)

Other published papers (list incomplete) by MWA collaboration: These have no real contribution from desh, and are hence separately/briefly listed below, merely for completeness.

- 1) Beardsley, A. P., et al. 2012 MNRAS.425.1781
- 2) Sullivan, I. S., et al. 2012 ApJ...759...17
- 3) McKinley, B., et al. 2013 AJ....145...23
- 4) Beardsley, A. P., et al. 2013 MNRAS.429L...5
- 5) Bernardi, G., et al. 2013 ApJ...771..105
- 6) Tingay, S. J., et al. 2013 AJ....146..103
- 7) McKinley, B., et al. 2013 MNRAS.436.1286
- 8) Offringa, A. R., et al. 2014 MNRAS.444..606
- 9) Hindson, L., et al. 2014 MNRAS.445..330
- 10) Murphy, T., et al. 2015 MNRAS.446.2560
- 11) Tingay, S. J., et al. 2015 AJ....149...74
- 12) McKinley, B., et al. 2015 MNRAS.446.3478
- 13) Hurley-Walker, N., et al. 2015 MNRAS.447.2468
- 14) Offringa, A. R., et al. 2015 PASA...32....8
- 15) Loi, S. T., et al. 2015 GeoRL..42.3707
- 16) Wayth, R. B., et al. 2015 PASA...32...25
- 17) Dillon, J. S., et al. 2015 PhRvD..9113011
- 18) Thyagarajan, N., et al. 2015 ApJ...807L..28

- 19) Loi, S. T., et al. 2015 RaSc...50..574
- 20) Callingham, J. R., et al. 2015 ApJ...809..168
- 21) Kaplan, D. L., et al. 2015 ApJ...809L..12
- 22) George, L. T., et al. 2015 MNRAS.451.4207
- 23) Arora, B. S., et al. 2015 PASA...32...29
- 24) Loi, S. T., et al. 2015 MNRAS.453.2731
- 25) Tingay, S. J., et al. 2015 AJ....150..199
- 26) Pober, J. C., et al. 2016 ApJ...819....8
- 27) Neben, A. R., et al. 2016 ApJ...820...44
- 28) Giroletti, M., et al. 2016 A&A...588A.141
- 29) Hindson, L., et al. 2016 PASA...33...20
- 30) Rowlinson, A., et al. 2016 MNRAS.458.3506
- 31) Franzen, T. M. O., et al. 2016 MNRAS.459.3314
- 32) Bell, M. E., et al. 2016 MNRAS.461..908
- 33) Herzog, A., et al. 2016 A&A...593A.130
- 34) Lenc, E., et al. 2016 ApJ...830...38
- 35) Hurley-Walker, N., et al. 2017 MNRAS.464.1146
- 36) Feng, L., et al. 2017 AJ....153...98
- 37) Kapinska, A. D., et al. 2017 ApJ...838...68
- 38) Suresh, A., et al. 2017 ApJ...843...19
- 39) Cairns, I. H., et al. 2018 SciRep...8...1676
- 40) For, B. Q., et al. 2018 MNRAS...480...2743

and many similar.

Papers in *conference proceedings*

(1) **Observations of pulsars with the Gauribidanur Radio Telescope**

Deshpande, A. A., Sastry, Ch.V. and Radhakrishnan, V. 1984, *Proc. of the Workshop "Low frequency radio astronomy"*, NRAO, Green Bank, ed. W.C. Erickson and H. Cane, pp 25.

(2) **Estimating slow intensity fluctuations from short data stretches - the case of pulsar scintillation**

Deshpande, A. A., and Nityananda, R. 1989, *Proc. of the URSI/IAU Symposium on "Radio Astronomical Seeing"*, Beijing, eds. J.E. Baldwin & Wang Shouguan (Beijing: International Academic Publisher, 1990), pp 262.

(3) **Pulsar Observations at Decametric Wavelengths using the Gauribidanur Telescope**

Deshpande, A. A., and Radhakrishnan, V. 1990, "*The Magnetospheric Structure and Emission Mechanisms of Radio Pulsars*", *Proc. IAU colloquium 128*, eds. T.H. Hankins, J.M. Rankin & J.A. Gil (Poland: Pedagogical University Press, 1992), pp 193.

(4) **Source-noise in Radio Synthesis Images**

Anantharamaiah, K.R., Deshpande, A. A., Radhakrishnan, V., Ekers, R.D., Cornwell, T.J., and Goss, W.M. 1991, *Radio Interferometry: Theory, Techniques, and Applications*, eds. T.J. Cornwell and R.A. Perley (Astronomical Society of the Pacific, San Francisco), pp 6.

(5) **Source-noise in Radio Synthesis Images of Polarised Sources**

Deshpande, A. A. 1993, "*Very High Angular Resolution Imaging*", *Proc. IAU Symposium 158, Sydney*, eds. J.G. Robertson and W.J. Tango (Kluwer Academic Publishers: Dordrecht, 1994), pp 95.

(6) **The Interstellar Medium Surrounding the Vela Supernova Remnant**

Saravanan, T.P., Deshpande, A. A., and Srinivasan, G. 1993, Proceedings of the 6th *Asian-Pacific Regional Meeting on Astronomy of IAU, Pune*, eds. V.K. Kapahi, N.K. Dadhich, G. Swarup & J.V. Naralikar (Indian Academy of Sciences: Bangalore, 1995), *J. Astrophys. Astr.*, Suppl. to Vol. 16, pp 275.

(7) **Pulsar Observations with the GMRT**

Deshpande, A. A. 1993, Proceedings of the 6th *Asian-Pacific Regional Meeting on Astronomy of IAU, Pune*, eds. V.K. Kapahi, N.K. Dadhich, G. Swarup & J.V. Naralikar (Indian Academy of Sciences: Bangalore, 1995), *J. Astrophys. Astr.*, Suppl. to Vol. 16, pp 225.

(8) **Progenitors of Pulsars**

Deshpande, A. A., Ramachandran, R., and Srinivasan, G. 1994, Proceedings of the *Diamond Jubilee Symposium on Pulsars*, ed. G. Srinivasan (Indian Academy of Sciences: Bangalore, 1995), *J. Astrophys. Astr.*, 16, 69.

(9) **Do Pulsars Define a Spiral Pattern ?**

Deshpande, A. A., 1994, Proceedings of the 16th meeting of the *Astronomical Society of India, Pune*, ed. V.K. Kapahi (Astronomical Society of India: 1995), *Bull. A.S.I.*, 23(4), 459.

(10) **Periodic Variations in Intensities and Arrival Times of Pulses from the Vela Pulsar: Evidence for Free Precession ?**

Deshpande, A. A., and McCulloch, P.M. 1996, *Pulsars: Problems and Progress*, eds. S. Johnston, M.A. Walker, and M. Bailes, ASP Conference Series, Vol. 105, pp 101.

(11) **Shapes of Pulsar Beams Revisited**

Mitra, D. and Deshpande, A.A. 1999, Proceedings of the 18th meeting of the *Astronomical Society of India: Ahmedabad, 1997*, *Bull. A.S.I.*, 27, 203.

(12) **New Pulsar Observations Using the Gauribidanur Radio Telescope**

Ashish Asgekar and Deshpande, A.A. 1999, Proceedings of the 18th meeting of the *Astronomical*

Society of India: Ahmedabad, 1997, Bull. A.S.I., 27, 209.

(13) Characteristics of Pulsar Radio Emission at Single-pulse Resolution

Deshpande, A. A., 2000, *Pulsar Astronomy - 2000 and Beyond*, Proceedings of the 177th Colloquium of the IAU held in Bonn, Germany, 1999. (San Francisco: ASP), ASP Conference Series, Vol. 202, p. 149. (Ed.s M. Kramer, N. Wex, and N. Wielebinski).

(14) Polar-Fluxtube Emission ‘Weather’ of Pulsar B0943+10: Polarisation, Modes, & Theoretical Implications

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