

Jayant V. Narlikar

LIST OF PUBLICATIONS - I

Research Publications

A : *Publications in research journals*

B : *Publications in conference proceedings, festschrifts etc.*

C : *Review articles*

1961

- 1A On the counting of radio sources in the steady-state cosmology
F. Hoyle and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **123**, 133
- 2B Rotating Universes
J.V. Narlikar
Evidence for Gravitational Theories, Proceedings of the Enrico Fermi Summer School at Varenna, Course XX, Ed. C. Miller (Academic Press), 222

1962

- 3A Steady state model and the ages of galaxies
F. Hoyle and **J.V. Narlikar**
The Observatory, **82**, 13
- 4A Neutrinos and the arrow of time in cosmology
J.V. Narlikar
Proceedings of the Royal Society, **A270**, 553
- 5A On the counting of radio sources in the steady-state cosmology, II
F. Hoyle and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **125**, 13
- 6B Mach's principle and the creation of matter
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A270**, 334: A discussion on the present state of relativity

1963

- 7A Newtonian universes with shear and rotation
J.V. Narlikar
Monthly Notices of the Royal Astronomical Society, **126**, 203
- 8A Mach's principle and the creation of matter
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A273**, 1
- 9A Time symmetric electrodynamics and the arrow of time in cosmology
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A277**, 1

1964

- 10A Electromagnetic waves from very dense stars
F. Hoyle, **J.V. Narlikar** and J.A. Wheeler
Nature, **203**, 914
- 11A On the avoidance of singularity in C-field cosmology
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A278**, 465
- 12A The C-field as a direct particle field
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A282**, 178
- 13A On the gravitational influence of direct particle fields
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A282**, 184
- 14A A new theory of gravitation
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A282**, 191
- 15A On the behaviour of radiation near massive bodies
J. Faulkner, F. Hoyle and **J.V. Narlikar**
The Astrophysical Journal, **140**, 1100
- 16B Neutrinos and the absorber theory of radiation
J.V. Narlikar
Proceedings on Theory of Gravitation, Warsaw Conference on General Relativity and Gravitation, Ed. L. Infeld (Gauthier-Villars), 366

1965

- 17A The direction of time
J.V. Narlikar
The British Journal for the Philosophy of Science, **XV**, 281

1966

- 18A On Newtonian universes
J.V. Narlikar
Monthly Notices of the Royal Astronomical Society, **131**, 501
- 19A On the effects of the non-conservation of baryons in cosmology
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A290**, 143
- 20A A radical departure from the 'steady state' concept in cosmology
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A290**, 162
- 21A On the formation of elliptical galaxies
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A290**, 177
- 22A A conformal theory of gravitation
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A294**, 138
- 23A Role of the acceleration in relativistically expanding objects and its significance for the intensity variations in quasistellar sources
J.V. Narlikar
Nature, **212**, 1337
- 24C Cosmological models and their observational validation
W. Davidson and **J.V. Narlikar**
Reports on Progress in Physics, **XXIX**, 539

1967

- 25A On a wavefunction picture for the direct particle theory of gravitation and electromagnetism
F. Hoyle and **J.V. Narlikar**
Proceedings of the Royal Society, **A299**, 188

- 26A Microwave background in a steady-state universe
J.V. Narlikar and N.C. Wickramasinghe
Nature, **216**, 43
- 27B Time-symmetrical electrodynamics and cosmology
 F. Hoyle and **J.V. Narlikar**
Nature of Time, Proceedings of the Workshop at Cornell
 University, Ed. T. Gold (Cornell University), 25

1968

- 28A On the general correspondence between field theories and the
 theories of direct interparticle action
J.V. Narlikar
Proceedings of Cambridge Philosophical Society, **64**, 1071
- 29A Interpretation of the cosmic microwave background
J.V. Narlikar and N.C. Wickramasinghe
Nature, **217**, 1235
- 30A Pulsed radio sources
 F. Hoyle and **J.V. Narlikar**
Nature, **218**, 123
- 31A Cosmology and quantum electrodynamics
 F. Hoyle and **J.V. Narlikar**
Nature, **219**, 340
- 32A Cosmology and electrodynamics
 F. Hoyle and **J.V. Narlikar**
Nature, **220**, 893
- 33B Recent developments in cosmology
J.V. Narlikar
Symposia on Theoretical Physics and Mathematics, Ed. A.
 Ramakrishnan, (Plenum Press), **6**, 65

1969

- 34A Cosmology and quantum electrodynamics
 F. Hoyle and **J.V. Narlikar**
Nature, **222**, 1040
- 35A Electrodynamics of direct interparticle action I : The
 quantum mechanical response of the universe
 F. Hoyle and **J.V. Narlikar**
Annals of Physics, **54**, 207

1970

- 36A Biscalar and bivector Green's functions in de sitter space time
J.V. Narlikar
Proceedings of the National Academy of Sciences, U.S.A., **65**, 483
- 37A Quantization of Wheeler-Feynman electrodynamics
F. Hoyle and **J.V. Narlikar**
Nature, **225**, 1233
- 38A Effect of quantum conditions in a Friedmann cosmology
F. Hoyle and **J.V. Narlikar**
Nature, **228**, 544
- 39B Time asymmetry in electrodynamics and cosmology
J.V. Narlikar
Pure and Applied Chemistry, **22**, 449

1971

- 40A Electrodynamics of direct interparticle action II :
Relativistic treatment of radiative processes
F. Hoyle and **J.V. Narlikar**
Annals of Physics, **62**, 44
- 41A On the nature of mass
F. Hoyle and **J.V. Narlikar**
Nature, **233**, 41

1972

- 42A On the relation of infinitesimal particle propagator to the nature of mass
F. Hoyle and **J.V. Narlikar**
Il Nuovo Cimento, **7A**, 242
- 43A A direct particle theory of weak interactions
F. Hoyle and **J.V. Narlikar**
Il Nuovo Cimento, **7A**, 262
- 44A Cosmological models in a conformally invariant gravitational
theory-I : The Friedmann model
F. Hoyle and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **155**, 305
- 45A Cosmological models in a conformally invariant gravitational theory-II : A new model
F. Hoyle and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **155**, 323

- 46A The mass difference between the muon and the electron
F. Hoyle and **J.V. Narlikar**
Nature, **238**, 86
- 47A Path amplitudes for Dirac particles
J.V. Narlikar
Journal of the Indian Mathematical Society, **36**, 9
- 48B Conformal invariance in physics and cosmology
F. Hoyle and **J.V. Narlikar**
Cosmology, Fusion and Other Matters, The George Gamow
Commemoration Volume, Ed. F. Reines (Colorado Associated
University Press), 15.
- 49B High energy phenomena in astrophysics
J.V. Narlikar
Proceedings of the First Symposium on High Energy Physics
at IIT, Bombay, Eds. P.K. Malhotra, V. Gupta and
S.N. Ganguli, (D.A.E.), 479

1973

- 50A Singularity and matter creation in cosmological models
J.V. Narlikar
Nature (Physical Science), **242**, 135
- 51B A new source of the origin of high energy cosmic rays
J.V. Narlikar
Proceedings of the 13th International Cosmic Ray Conference
at Denver, Ed. R.L. Chasson (University of Denver), 5, 3250

1974

- 52A Lepton creation and the Dirac relationship between fundamental constants
J.V. Narlikar
Nature, **247**, 99
- 53A Minibangs in cosmology and astrophysics
J.V. Narlikar
Pramana, **2**, 158
- 54A Central redshifts from static massive spheres
P.K. Das and **J.V. Narlikar**
Bulletin of the Astronomical Society of India, **2**, 12
- 55A Stress energy tensors in the theory of direct interparticle action
J.V. Narlikar
Journal of Physics, **A7**, 1274

- 56A High energy radiation from white holes
J.V. Narlikar, K.M.V. Apparao and N. Dadhich
Nature, **251**, 590
- 57A Gravitational Searchlight and its astrophysical applications
 S.M. Chitre, **J.V. Narlikar** and R.C. Kapoor
Nature, **252**, 460
- 58B Thermodynamics and cosmology
J.V. Narlikar
Modern Developments in Thermodynamics Ed. B. Gal-Or
 (John Wiley), 53
- 59B Redshifts of quasistellar objects
J.V. Narlikar
Astrophysics Symposium at PRL, Ahmedabad
- 60B The relevance of infrared and millimetre wave astronomy to
 cosmology
J.V. Narlikar
*Proceedings of Seminar on Infrared and millimetre wave
 Astronomy*, Hyderabad, Eds. S.M. Alladin and K.D. Abhyankar
 (CASA, Hyderabad), 1
- 61B Electrodynamics and cosmology
J.V. Narlikar
*High Energy Astrophysics and its Relation to Elementary
 Particle Physics*, Eds. K. Brecher and G. Setti
 (MIT) Press), 345

1975

- 62A Neutral currents and the cooling of neutron stars
 S.M. Chitre, **J.V. Narlikar** and S. Ramadurai
Astrophysics and Space Science, **33**, L45
- 63A Central gravitational redshifts from static massive objects
 P.K. Das and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **171**, 87
- 64A White holes and high energy astrophysics
J.V. Narlikar and K.M.V. Apparao
Astrophysics and Space Science, **35**, 321
- 65A A dust model for the cosmic microwave background
 N.C. Wickramasinghe, M.G. Edmunds, S.M. Chitre,
J.V. Narlikar and S. Ramadurai
Astrophysics and Space Science, **35**, L9

- 66A Blueshift and spectral features of the gravitational searchlight
S.M. Chitre, **J.V. Narlikar** and R.C. Kapoor
Journal of General Relativity and Gravitation, **6**, 477
- 67A Action and reaction in the theories of direct interparticle
action
J.V. Narlikar
Annals of Physics, **95**, 496
- 68A QSO redshifts and the steady state cosmology
J.V. Narlikar and P.K. Das
Nature, **258**, 660
- 69B Astronomy and laboratory physics
J.V. Narlikar
Science and Human Progress, Kosambi Commemoration Volume,
(Popular Prakashan), 233.
- 70B The gravitational searchlight effect
S.M. Chitre, **J.V. Narlikar** and R.C. Kapoor
Abstract, ASI Meeting at Kodaikanal, *Bulletin of the
Astronomical Society of India*, **3**, 33

1976

- 71A The log N-log S curve for 3CR radio galaxies and the problem
of identifying faint radio galaxies
G.R. Burbidge and **J.V. Narlikar**
Astrophysical Journal, **205**, 329
- 72A Tachyons and cosmology
J.V. Narlikar and E.C.G. Sudarshan
Monthly Notices of the Royal Astronomical Society, **175**, 105
- 73A Astrophysical applications of the gravitational searchlight
S.M. Chitre and **J.V. Narlikar**
Journal of General Relativity and Gravitation, **7**, 233
- 74A On the maximization of the central gravitational redshift of
a Schwarzschild sphere with a given surface redshift
J.V. Narlikar and P.K. Das
Journal of General Relativity and Gravitation, **7**, 769
- 75A Tachyon trajectories in Schwarzschild's space-time
J.V. Narlikar and S.V. Dhurandhar
Pramana, **6**, 388

- 76A The effect of intergalactic dust on the measurement of the cosmological deceleration parameter q_0
S.M. Chitre and J.V. Narlikar
Astrophysics and Space Science, **44**, 101
- 77A A New test of the cosmological nature of QSO redshifts
J.V. Narlikar and S. Ramadurai
Nature, **264**, 732
- 78B Limits on a microwave background without the big bang
J.V. Narlikar, M.G. Edmunds and N.C. Wickramasinghe
Far Infrared Astronomy, Proceedings of the RAS Far Infrared Astronomy Conference held at Windsor, U.K., Ed. M. Rowan-Robinson (Pergamon), 131
- 79B Noncosmological redshifts
J.V. Narlikar
Decalages vers le Rouge et Expansion de L'Univers/ L'Evolution des Galaxies et ses Implications Cosmologiques.
 Proceedings of the IAU/CNRS Colloquium, Eds. C. Balkowski and B.E. Westerlund (CNRS, Paris), 497
- 80B The angular size-flux density relation for extragalactic radio sources
J.V. Narlikar
 Proceedings of the IAU Symposium No. 74 on *Radioastronomy and Cosmology*, Ed. D.L. Jauncey (D. Reidel), 132
- 81B The role of general relativity in astrophysics
J.V. Narlikar
Proceedings of the International Dedication Seminar, Banaras Hindu University, (B.H.U.), 1

1977

- 82A Spacetime singularities and conformal gravity
J.V. Narlikar and A.K. Kembhavi
Il Nuovo Cimento Letters, **19**, 517
- 83A Two astrophysical applications of conformal gravity
J.V. Narlikar
Annals of Physics, **107**, 325
- 84A Applications of statistical techniques to the angular size-flux density relation for extragalactic radio sources
J.V. Narlikar and S.M. Chitre
Monthly Notices of the Royal Astronomical Society, **180**, 525
- 85A Quantum uncertainty in the final state of gravitational collapse
J.V. Narlikar
Nature, **269**, 129

- 86B Anomalous redshifts and conformal gravity
J.V. Narlikar
Gravity Research Foundation Essay awarded Honorary Mention
- 87B Quantum uncertainty in gravitational collapse
J.V. Narlikar
Abstracts-Volume, GR-8, Waterloo, (University of Waterloo), 259
- 88B Zero-mass surfaces and space-time singularities
J.V. Narlikar
Abstracts-Volume, GR-8, Waterloo, (University of Waterloo), 260

1978

- 89A The angular appearance of white holes
J.V. Narlikar and R.C. Kapoor
Astrophysics and Space Science, 53, 155
- 90A Quantum fluctuations in gravitational collapse and cosmology
J.V. Narlikar
Monthly Notices of the Royal Astronomical Society, 183, 159
- 91A Black holes as detectors of tachyons
J.V. Narlikar and S.V. Dhurandhar
Il Nuovo Cimento Letters, 23, 513
- 92A Tachyons and the second law of black hole physics
S.V. Dhurandhar and **J.V. Narlikar**
Journal of General Relativity and Gravitation, 9, 1089
- 93B The role of white holes in astrophysics
J.V. Narlikar
Proceedings of the International Conference on *Frontiers of Theoretical Physics* at New Delhi, Ed. F.C. Auluck, L.S. Kothari, V.S. Nanda (Macmillan), 63
- 94B Tachyons and cosmology
J.V. Narlikar
Proceedings of the S.N. Bose Symposium on General Relativity and Unified Field Theory, Ed. B. Dutta (S.N. Bose Institute), 35
- 95B Quantum fluctuations near the classical space-time singularity
J.V. Narlikar
Gravity Research Foundation Essay awarded honorary mention.

- 96B The structure of the universe and its relation to life supporting environment
J.V. Narlikar
Proceedings of the Workshop on *Chemical Evolution, Origin of life and Evolution of Life Processes*, Hyderabad, Ed. M.S. Chadha (I.S.R.O.), 9

1979

- 97A Hawking process and the cosmic microwave background in a steady state universe
J.V. Narlikar and N.C. Rana
Physics Letters, **A72**, 75
- 98A On the apparent superluminal separation of radio sources components
S.M. Chitre and **J.V. Narlikar**
Monthly Notices of the Royal Astronomical Society, **187**, 655
- 99A Quantum fluctuations near the classical space-time singularity
J.V. Narlikar
Journal of General Relativity and Gravitation, **10**, 883
- 100B Inertia and cosmology in Einstein's relativity
J.V. Narlikar
Relativity, Quanta and Cosmology, Einstein Centenary Volume II. Eds. M. Pantaleo and F. de Finis (Johnson Reprint Corporation), 493
- 101B Gravitational screens and the apparent superluminal separation in quasars
J.V. Narlikar and S.M. Chitre
Gravity Research Foundation Essay awarded honorary mention.

1980

- 102A Gravitational screens and superluminal separation in quasars
S.M. Chitre and **J.V. Narlikar**
The Astrophysical Journal, **235**, 335
- 103A Cosmological tests of the Hoyle-Narlikar conformal gravity
V.M. Canuto and **J.V. Narlikar**
The Astrophysical Journal, **236**, 6
- 104A Cosmic microwave background spectrum and G-varying cosmology
J.V. Narlikar and N.C. Rana
Physics Letters, **A77**, 219
- 105A Anomalous redshifts of quasi-stellar objects
J.V. Narlikar and P.K. Das
The Astrophysical Journal, **240**, 401

- 106A The diffuse gamma-ray background in the Hoyle-Narlikar cosmology
V.M. Canuto, J.R. Owen and **J.V. Narlikar**
Astronomy and Astrophysics, **92**, 26
- 107B Anomalous redshifts of QSOs
J.V. Narlikar and P.K. Das
Objects of High Redshifts, Proceedings of IAU Symposium
No. 92 at Los Angeles Eds. G.O. Abell and P.J.E. Peebles
(Reidel), 127
- 108B Cosmology in the Post-Einstein Era
J.V. Narlikar
Gravitation, Quanta and the Universe, Proceedings of the
Einstein Centenary Symposium at Ahmedabad. Eds.
A.R. Prasanna, J.V. Narlikar and C.V. Vishveshwara (Wiley
Eastern), 93
- 109B Quantum fluctuations in the Schwarzschild spacetime
J.V. Narlikar and T. Padmanabhan
Abstracts Volume, GR-9, Jena, 580
- 110C Nonstandard cosmologies
J.V. Narlikar and A.K. Kembhavi
Fundamentals of Cosmic Physics, **6**, 1

1981

- 111A An empirical approach to cosmology
J.V. Narlikar and G.R. Burbidge
Astrophysics and Space Sciences, **74**, 111
- 112A A pi-less area
J.V. Narlikar
The Mathematical gazette, **65**, 29
- 113A Quantum conformal fluctuations near the classical spacetime singularity
J.V. Narlikar
Foundations of Physics, **11**, 473
- 114A Quantum fluctuations in the conformally flat and the Schwarzschild spacetimes
T. Padmanabhan and **J.V. Narlikar**
General Relativity and Gravitation, **13**, 669
- 115A Stationary states in a quantum gravity model
T. Padmanabhan and **J.V. Narlikar**
Physics Letters, **84A**, 361

- 116A A Doppler theory of quasars
J.V. Narlikar and M.G. Edmunds
Journal of Astrophysics and Astronomy, **2**, 289

1982

- 117A Massive Oscillators as cosmic energy sources
K.M.V. Apparao and **J.V. Narlikar**
Astrophysics and Space Science, **81**, 397
- 118A Quantum conformal fluctuations in a singular spacetime
T. Padmanabhan and **J.V. Narlikar**
Nature, **295**, 677
- 119A Observational limitations of the Doppler theory of quasars
J.V. Narlikar and K. Subramaniam
The Astrophysical Journal, **260**, 469
- 120A Black hole physics in globally hyperbolic space-times
P.S. Joshi and **J.V. Narlikar**
Pramana, **18**, 385
- 121A On a nonlinear and Lorentz-invariant version of Newtonian gravitation
J.J. Rawal and **J.V. Narlikar**
Journal of Astrophysics and Astronomy, **3**, 393
- 122A Nucleosynthesis in bouncing cosmologies
J.V. Narlikar and K.M.V. Apparao
Astrophysics and Space Sciences, **87**, 333
- 123B Statistical techniques in astronomy
J.V. Narlikar
Sankhya, **B44**, 125, Convocation Address at ISI, Calcutta

1983

- 124A Cosmologies with variable gravitational constant
J.V. Narlikar
Foundations of Physics, **13**, 311, (The Dirac Festschrift Volume)
- 125A Cosmic energy machines
J.V. Narlikar
Current Science, **52**, 227
- 126A The contribution of quasistellar objects to the cosmic X-ray background
J.V. Narlikar and G.R. Burbidge
Astronomy and Astrophysics, **118**, 154

- 127A Elimination of the standard big bang singularity and particle horizon through quantum conformal fluctuations
J.V. Narlikar
Physics Letters, **96A**, 107
- 128A A single exhaust model for backward emission in Doppler quasars
J.V. Narlikar and K. Subramaniam
The Astrophysical Journal, **273**, 44
- 129A The problems of singularity, particle horizon and flatness in quantum cosmology
J.V. Narlikar and T. Padmanabhan
Annals of Physics, **150**, 289
- 130A Cosmic microwave background spectrum in the Hoyle-Narlikar cosmology
J.V. Narlikar and N.C. Rana
Physics Letters, **99A**, 75
- 131A Quantum cosmology as a cure of three ailments of classical cosmology
T. Padmanabhan and **J.V. Narlikar**
Bulletin of the Astronomical Society of India, **11**, 297
- 132B Stationary states in quantum cosmology.
J.V. Narlikar
Mathematics Today, **1**, 1 (Volume dedicated to Professor P.C. Vaidya on his 60th birthday)
- 133B The Quasars Q 2345 + 007 A,B and 3C 273 : Gravitational Lenses?
K. Subramanian, D. Narasimha, S.M. Chitre and **J.V. Narlikar**
in *Quasars and Gravitational Lenses*, ed. J.P. Swings
(Liege University Press, Liege), 78
- 134B A single exhaust model for backward emission in fast moving quasars
K. Subramanian and **J.V. Narlikar**
Quasars and Gravitational Lenses, ed. J.P. Swings
(Liege University Press, Liege), 389
- 135B Radiation backgrounds and their cosmological implications
J.V. Narlikar
Proceedings of the 28th International Cosmic Ray Conference,
Bangalore, Ed. P.V. Ramana Murthy (T.I.F.R.), **12**, 9
- 136C Quantum cosmology via path integrals
J.V. Narlikar and T. Padmanabhan
Physics Reports, **C100**, 151

1984

- 137A Nonconservation of baryons in cosmology-revisited
J.V. Narlikar
Journal of Astrophysics and Astronomy, **5**, 67

- 138A The vanishing likelihood of spacetime singularity in quantum conformal cosmology
J.V. Narlikar
Foundations of Physics, **14**, 443
- 139A Faster-than-light motion in quasars
J.V. Narlikar and S.M. Chitre
Journal of Astrophysics and Astronomy, **5**, 495
- 140A The radiation of microwaves and infrared by slender graphite needles
F. Hoyle, **J.V. Narlikar** and N.C. Wickramasinghe
Astrophysics and Space Science, **103**, 371
- 141A 3C 273 : a gravitationally lensed quasar?
S.M. Chitre, D. Narasimha, **J.V. Narlikar** and K. Subramanian
Astronomy and Astrophysics, **139**, 289
- 142B Noncosmological redshifts
Presidential Address to the Ninth Meeting of the ASI at Hyderabad.
J.V. Narlikar
Bulletin of the Astronomical Society of India, **12**, 1
- 143B A new approach to quantum cosmology
J.V. Narlikar
Proceedings of the First Asia-Pacific Physics Conference,
Singapore, Eds. A. Arima, C.K. Chew, T. Ninomiya, P.P. Ong, K.K. Phua, K.L.
Tan (World Scientific), 619
- 144B Quantum fluctuations near the classical spacetime singularity
J.V. Narlikar
Gravitation and Relativistic Astrophysics, Proceedings of the Ahmedabad workshop,
Eds. A.R. Prasanna, J.V. Narlikar and C.V. Vishveshwara (World Scientific), 135
- 145B Inputs from astronomy into fundamental studies
J.V. Narlikar
Fundamental Studies and the Future of Science,
(Proceedings of the Inaugural Seminar, IFS, Sri Lanka)
Ed. N.C. Wickramasinghe (University College, Cardiff Press), 129

1985

- 146A Counter images in closed elliptical Friedmann universes
J.V. Narlikar and T.R. Seshadri
The Astrophysical Journal, **288**, 43
- 147A The big bang and quantum cosmology
J.V. Narlikar
Current Science, **54**, 825

- 148A Creation field cosmology : a possible solution to singularity, horizon and flatness problems
J.V. Narlikar and T. Padmanabhan
Physical Review, **D32**, 1928
- 149A On a nonlinear and Lorentz-invariant version of Newtonian gravitation-II
J.V. Narlikar and T. Padmanabhan
Journal of Astrophysics and Astronomy, **6**, 171
- 150A Newtonian N-body calculations of the advance of Mercury's perihelion
J.V. Narlikar and N.C. Rana
Monthly Notices of the Royal Astronomical Society, **213**, 657
- 151A The statistical significance of close pairs of QSOs
G.R. Burbidge, **J.V. Narlikar** and A. Hewitt
Nature, **317**, 413
- 152A The statistical significance of a large quasar inhomogeneity in the sky
J.V. Narlikar and K. Subramaniam
Astronomy and Astrophysics, **151**, 264
- 153A The volume of a tetrahedron
J.V. Narlikar
Mathematical Education, **2**, 38
- 154B Did the universe have an origin?
J.V. Narlikar
(The S.N. Bose Memorial Lecture of the Indian Physical Society, Calcutta.)
Proceedings of the Indian Association for Cultivation of Science, **68B**, 7
- 155B Some aspects of modern cosmology
J.V. Narlikar
Proceedings of the Second Asia-Pacific Regional Meeting of the IAU at Bandung, Ed. B. Hidayat and M.W. Feast (Tira Pustaka, Jakartal), 281
- 156B The relationship of local time asymmetry to cosmology
J.V. Narlikar
Living State II. (Proceedings of the Second International Seminar on Living State at Bhopal) Ed. R.K. Mishra (World Scientific), 613
- 157B Quantum cosmology and the early universe
J.V. Narlikar
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(Proceedings of the Third Rome Meeting on Astrophysics).
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- 158B Some conceptual problems in general relativity and cosmology
J.V. Narlikar
A Randon Walk in Relativity and Cosmology
(Vaidya-Raychaudhari Festschrift) Eds. N.K. Dadhich, J. Krishna Rao,
J.V. Narlikar and C.V. Vishveshwara (Wiley Eastern), 171

- 159B Backward emission in quasars
J.V. Narlikar
Extragalactic Energetic Sources. (Proceedings of the Bangalore Winter School) Ed. V.K. Kapahi (Indian Academy of Sciences), 135
- 160B The very early universe : problems and perspectives
(Presidential Address to the Tenth Meeting of the Astronomical Society of India at Bombay)
J.V. Narlikar
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1986

- 161A Conformal quantization and space-time singularity
P.S. Joshi and **J.V. Narlikar**
International Journal of Modern Physics, **A1**, 243
- 162A The luminosity volume test and the local hypothesis of quasars
F. Hoyle and **J.V. Narlikar**
Journal of Astrophysics and Astronomy, **7**, 99
- 163A Temperature fluctuations of cosmic microwave background induced by gravitational lensing
S.M. Chitre, **J.V. Narlikar** and T. Padmanabhan
Physics Letters, **A117**, 285
- 164B Noncosmological redshifts
J.V. Narlikar
Quasars, (Proceedings of IAU Symposium No. 119 at Bangalore)
Eds. G. Swarup and V.K. Kapahi (Reidel), 463
- 165B Baryon non-conservation and Cosmology
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