

INDEX

Numbers prefixed by S are Astrophysical Supplement numbers

	PAGE		PAGE
Ables, J. G.—		Bolton, J. G.—	
<i>See</i> Komesaroff, M. M.	759	<i>See</i> Shimmins, A. J.	S23, S26
Acoustics: backscatter from rough water		Boswell, R. W.—	
surface	419	Dependence of helicon wave radial	
Acoustics: radiation pressure forces and		structure on electron inertia	403
torques	275	Brooks, J. W.—	
Aller, L. H., and Milne, D. K.—		<i>See</i> McGee, R. X.	581, 613
Observations at 2700 MHz of selected		Broomhall, G. J.—	
planetary nebulae	91	Capture of 10–100 keV neutrons in	
Aluminium: excited states of ^{27}Al		isotopes of titanium	9
following photodisintegration of ^{28}Si	669	Broten, N. W.—	
Andrews, J. C.—		The radio continuum of the Large	
Microwave absorption in compressed		Magellanic Cloud. II. Continuum	
carbon monoxide and nitrous oxide	283	observations at 11 cm wavelength	599
Argon, diffusion of electrons in	637		
Argon, self-diffusion coefficients of . .	529	Campbell, J. A.—	
<i>Astronomy</i>		Effect of rapidly rising proton–proton	
Redshifts of 27 radio galaxies. . . .	233	total cross sections on idealized	
<i>See also</i> Radio astronomy		extensive air showers	679
		Cannon, C. J.—	
Barker, F. C.—		A general formulation of the transfer	
The boundary condition parameter in		equation. II. Line formation with	
<i>R</i> -matrix theory	341	general redistribution.	177
Barrett, R. F.—		Carlson, L. E.—	
<i>See</i> Thies, H. H.	361	<i>See</i> Gardner, P. R.	659
Batchelor, R. A.—		Carlson, L. E., Davidson, W. F., Zuk,	
<i>See</i> McGee, R. X.	581, 613	W. M., and Najam, M. R.—	
Bertram, W. K.—		Spin determination from compound	
A method for inverting the channel		nuclear reaction yields	673
matrix in <i>R</i> -matrix theory	253	Caswell, J. L.—	
<i>See also</i> Cook, J. L.	479	Hydrogen recombination line and	
Bertram, W. K., and Cook, J. L.—		continuum observations at 5000 MHz	
On the non-invariance of distributions		of 13 southern HII regions	443
of reaction matrix parameters under		<i>See also</i> Day, G. A.	S25
changes in boundary conditions . .	349	Cawthron, E. R.—	
Bhatia, P. K., and Steiner, J. M.—		Rutherford back scattering of protons	
Larmor radius and collisional effects		at medium energies	113
on the dynamic stability of a		Champion, N. D.—	
composite medium	259	<i>See</i> Thomson, J. E. M.	669
Oscillatory convection in a viscoelastic		Clarke, R. W.—	
fluid layer in hydromagnetics	695	Lunar occultation observations of	
Blatt, D. W. E., and McKellar, B. H. J.—		24 radio sources	215
An approximation to the reaction		Comins, H. N., and Hewitt, R. G. L.—	
matrix in nuclear matter	1	Calculations with reaction matrices in	
		the p–f shell	651

	PAGE		PAGE
Cook, J. L.—		Dexter, P. E.—	
A note on the Adler-Adler resonance formalism	247	Observations of the backscatter of ultrasonic waves from a rough water surface	419
General relativity in the equal proper time formalism	469	Dickel, J. R., and Milne, D. K.—	
Reaction matrix approach to the inverse problem	167	Classification of supernova remnants and HII regions from their recombination line emission	539
Solutions of the relativistic two-body problem.		Dipoles, energy of interaction between molecules represented as	33
I. Classical mechanics	117	Dodd, L. R.—	
II. Quantum mechanics	141	Numerical study of a model three-body system	507
<i>See also</i> Bertram, W. K.	349	Dulk, G. A.—	
Cook, J. L., and Bertram, W. K.—		<i>See</i> Slee, O. B.	103
Compound nucleus formulation of reaction matrix theory	479	Dulk, G. A., and Slee, O. B.—	
Cook, M. W.—		The absorption by the interstellar medium of 80 MHz radio emission from galactic supernova remnants	429
Approximate solutions of the relativistic gravitational field equations to describe clusters of galaxies	299	Dutt, R. C.—	
On gravitational aberrations in stellar images	749	<i>See</i> Gatha, K. M.	337
Cooke, D. J.—		Dyson, P. L.—	
<i>See</i> Day, G. A.	S25	A method for determining the electron density distribution about the F_2 peak of the ionosphere	293
Cosmic rays: effect of rapidly rising pp total cross sections on idealized extensive showers	679	Electrodynamics: radiation from accelerated point dipoles	197
<i>Cosmology</i>		Fisher, R. A., and Watts, R. O.—	
Approximate solutions of field equations to describe clusters of galaxies	299	Calculated self-diffusion coefficients for liquid argon	529
Gravitational aberrations in stellar images	749	The friction coefficient formalism in the statistical mechanics of transport processes	21
Models with two fluids	75, 83	<i>Fluid physics</i>	
Time direction of information propagation	207	Friction coefficient formalism in statistical mechanics of transport	21
Crawford, D. M.—		Interfaces near critical point	367
<i>See</i> Thies, H. H.	361	<i>See also</i> Magnetohydrodynamics	
Crompton, R. W.—		Foyster, J. M.—	
The present status of the Townsend-Huxley experiment in theory and practice	409	<i>See</i> McIntosh, C. B. G.	83
Davidson, W. F.—		Gardner, P. R., Moss, C. E., Spear, R. H., and Carlson, L. E.—	
<i>See</i> Carlson, L. E.	673	The 5-80 MeV state of ^{32}S	659
Day, G. A., Caswell, J. L., and Cooke, D. J.—		<i>Gaseous electronics</i>	
A low-latitude galactic survey from $l^{\text{II}} = 46^\circ$ to 61° and 190° to 290° at 2700 MHz	S25	Anisotropic diffusion of electrons	43
Abstract to S25	779	Calculation of electron drift velocity	329
Denton, R. E., and Tomlin, S. G.—		Effect of clustering on measurement of ion mobility	465
Optical properties of thin germanium films	743		

	PAGE		PAGE
<i>Gaseous electronics</i>		Jauncey, D. L.—	
Longitudinal diffusion of electrons in		See Hoskins, D. G.	559
argon	637	Jupiter's synchrotron emission, 80 MHz	
Model for electron group drifting		measurements of	103
between plane parallel electrodes . .	523		
Present status of Townsend-Huxley		Koch, R.—	
experiment	409	See Thies, H. H.	361
Thermodynamic treatment of		Komesaroff, M. M., Hamilton, P. A.,	
anisotropic diffusion	685	and Ables, J. G.—	
Gatha, K. M., the late, and Dutt, R. C.—		Linear polarization and spectrum of	
<i>Corrigenda to: Tetrads, anholonomic</i>		PSR 0833—45 and the effects of	
coordinates, and space-time geometry	337	scattering	759
Geomagnetism: relationship with E_s at			
middle latitudes	97	Lee, F.—	
Germanium films, optical properties of	743	See Thies, H. H.	361
Goodwin, G. L.—		Legg, A. J.—	
Relationship between E_s and the		See Gubbay, J. S.	461
Earth's magnetic field at middle		Lewis, B. M.—	
latitudes	97	21 cm observations of NGC 45 . .	315
Gubbay, J. S., Legg, A. J., and		Lockhart, I. A.—	
Robertson, D. S.—		See Schilizzi, R. T.	545
Australian east-west baseline inter-			
ferometer observations at 2.3 GHz . .	461		
		McCarthy, I. E., and Tandy, P. C.—	
Hamilton, P. A.—		Coulomb interference in the half-shell	
See Komesaroff, M. M.	759	t -matrix derived from the Hamada-	
Hazard, C.—		Johnston potential	237
See Hoskins, D. G.	559	McDaniel, E. W.—	
Heat convection in fluids, magnetic		The effect of clustering on the measure-	
inhibition of	703	ment of the mobility of potassium ions	
Heat convection in viscoelastic fluid		in nitrogen gas	465
layer	695	McGee, R. X., Brooks, J. W., and	
Helium, gaseous and liquid, <i>ab initio</i>		Batchelor, R. A.—	
calculations for	735	The radio continuum of the Large	
Hewitt, R. G. L.—		Magellanic Cloud.	
See Comins, H. N.	651	I. The sources at 6 cm wavelength . .	581
Hoskins, D. G., Murdoch, H. S., Hazard,		III. The sources at 11 cm wavelength .	613
C., and Jauncey, D. L.—		McGee, R. X., and Newton, Lynette M.—	
Positions and some identifications for		The radio continuum of the Large	
111 sources of about 1 flux unit at		Magellanic Cloud. IV. Spectra of	
408 MHz	559	sources	619
Huxley, L. G. H.—		McIntosh, C. B. G.—	
Mathematical model for a group of		Cosmological models with two fluids.	
electrons drifting between plane		I. Robertson-Walker metric	75
parallel electrodes	523	McIntosh, C. B. G., and Foyster, J. M.—	
On the theory of anisotropic diffusion		Cosmological models with two fluids.	
of electrons in gases	43	II. Conformal and conformally flat	
		metrics	83
		McKellar, B. H. J.—	
Ja, Y. H.—		See Blatt, D. W. E.	1
The effect of a temperature gradient		Magellanic clouds, radio continuum of	
in a single crystal on e.p.r. line shape			581, 599, 613, 619
and width	107		

	PAGE		PAGE
<i>Magnetohydrodynamics</i>		Musgrove, A. R. de L.—	
Magnetic inhibition of thermal convection	703	Detailed calculations of correlations occurring in light-particle-accompanied spontaneous fission	499
Oscillatory convection in viscoelastic layer	695		
Solutions for steady channel flow with anisotropic conductivity	719	Najam, M. R.—	
Melrose, D. B., and Sy, W. N.—		See Carlson, L. E.	673
Plasma emission processes in a magnetoactive plasma	387	Newton, Lynette M.—	
Merkelijn, Jeannette K.—		See McGee, R. X.	619
Improved positions and some identifications for 108 radio sources between declinations -33° and $+27^\circ$	451	Ninham, B. W.—	
Microwave absorption in compressed gases	283	See Mitchell, D. J.	33
Milne, D. K.—		Sarkies, K. W.	367
Polarized radio emission from five supernova remnants	307	<i>Nuclear physics</i>	
See also Aller, L. H.	91	Approximation to reaction matrix ..	1
Dickel, J. R.	539	Calculations with reaction matrices in p-f shell	651
Mishra, S. P., Shukla, P. K., and Misra, K. D.—		Channel matrix inversion in <i>R</i> -matrix theory	253
Propagation of electromagnetic waves in a weakly ionized warm magneto-plasma	265	Compound nucleus formulation of <i>R</i> -matrix theory	479
Misra, K. D.—		Coulomb interference in half-shell <i>t</i> -matrix	237
See Mishra, S. P.	265	Detailed calculations of correlations in light-particle-accompanied spontaneous fission	499
Mitchell, D. J., Ninham, B. W., and Richmond, P.—		Excited states of ^{27}Al and ^{27}Si following photodisintegration of ^{28}Si	669
Exact energy of interaction between nonpolar molecules represented as dipoles	33	5.80 MeV state of ^{32}S	659
Monaghan, J. J., and Shapcott, C. M.—		keV neutron capture in titanium ..	9
Radiation from accelerated point dipoles in circular and Keplerian orbits	197	Non-invariance of distributions of <i>R</i> -matrix parameters under changes in boundary conditions	349
Moon: occultation observations of radio sources	215	Note on Adler-Adler resonance formalism	247
Moss, C. E.—		Numerical study of model three-body system	507
See Gardner, P. R.	659	Optical potentials and eikonal approximations	643
Munro, R. E. B.—		<i>R</i> -matrix approach to inverse problem	167
<i>Corrigenda to:</i> Observations at 408 MHz of radio sources from the 4C catalogue. I and II	337	<i>R</i> -matrix boundary condition parameter	341
Observations at 408 MHz of radio sources from the 4C catalogue. IV. Declination range 20° to 0° ..	S22	Rutherford back scattering of protons at medium energies	113
Abstract to S22	339	Spin determination from compound nuclear reactions	673
Murdoch, H. S.—		Transformation of bremsstrahlung photoneutron data	361
See Hoskins, D. G.	559		
Murphy, J. O.—		Panton, D. M.—	
See Van der Borgh, R.	703	Second-order solutions for steady magnetohydrodynamic channel flow with anisotropic conductivity ..	719
		Parkes 2700 MHz survey	S24, S26

	PAGE		PAGE
Paveri-Fontana, S. L.—		Relativity, general, in equal proper time formalism	469
On the drift velocity of electrons in a gas	329	Richmond, P.—	
Pegg, D. T.—		<i>See</i> Mitchell, D. J.	33
Time direction of information propagation and cosmology	207	Sarkies, K. W.	367
<i>Plasma physics</i>		Robertson, A. G., and Rees, J. A.—	
Dependence of helicon wave radial structure on electron inertia	403	A note on the longitudinal diffusion of electrons in argon	637
Emission processes near plasma frequency	387	Robertson, D. S.—	
Larmor radius and collisional effects on dynamic stability	259	<i>See</i> Gubbay, J. S.	461
Propagation of electromagnetic waves	265	Robson, R. E.—	
		A thermodynamic treatment of anisotropic diffusion in an electric field	685
		Roof, R. B.—	
Radiative transfer equation, general formulation of	177	Indexing powder patterns for high pressure sulphur, phases I and III	335
<i>Radio astronomy</i>			
Accurate flux densities at 5009 MHz	S23	Sarkies, K. W., Richmond, P., and Ninham, B. W.—	
Classification of supernova remnants and HII regions	539	Physical theory of fluid interfaces near the critical point	367
Continuum of Large Magellanic Cloud	581, 599, 613, 619	Schilizzi, R. T., Lockhart, I. A., and Wall, J. V.—	
East-west baseline interferometer observations	461	Observations of the radio source PKS 0123—01 at 5000, 408, and 80 MHz	545
80 MHz measurements of Jupiter's synchrotron emission	103	Shapcott, C. M.—	
408 MHz observations of radio sources from 4C catalogue	S22	<i>See</i> Monaghan, J. J.	197
H 109 α and 5000 MHz observations of HII regions	443	Shimmins, A. J., and Bolton, J. G.—	
Improved positions and identifications	451	Accurate flux densities at 5009 MHz of 1007 radio sources	S23
Interstellar absorption of emission from supernova remnants	429	Abstract to S23	339
Low-latitude galactic survey at 2700 MHz	S25	The Parkes 2700 MHz survey (fourth part). Catalogue for the south polar cap zone, declinations —75° to —90°	S26
Lunar occultation observations	215	Abstract to S26	779
Observations of PKS 0123—01 at 5000, 408, and 80 MHz	545	Shukla, P. K.—	
Observations of planetary nebulae at 2700 MHz	91	<i>See</i> Mishra, S. P.	265
Observations of sources not in 4C catalogue	559	Silicon: excited states of ²⁷ Si following photodisintegration of ²⁸ Si	669
Parkes 2700 MHz survey	S24, S26	Slee, O. B.—	
Polarization and spectrum of PSR 0833—45	759	<i>See</i> Dulk, G. A.	429
Polarization of supernova remnants	307	Slee, O. B., and Dulk, G. A.—	
Redshifts of galaxies	233	80 MHz measurements of Jupiter's synchrotron emission	103
21 cm observations of NGC 45	315	Smith, W. E.—	
Rees, J. A.—		Acoustic radiation pressure forces and torques from elastic scattering	275
<i>See</i> Robertson, A. G.	637	Snook, I. K., and Watts, R. O.—	
Relativity: solutions of two-body problem	117, 141	<i>Ab initio</i> calculations for helium-4 of thermodynamic and transport properties of the gas and the ground state energy of the liquid	735

	PAGE		PAGE
<i>Solid state physics</i>		Thomson, J. E. M., Champion, N. D.,	
Effect of temperature gradient on		Stewart, R. J. J., and Thompson,	
e.p.r. line	107	M. N.—	
Indexing powder patterns for high		De-excitation gamma rays following	
pressure sulphur	335	photodisintegration of ^{28}Si	669
Optical properties of thin germanium		Titanium isotopes, neutron capture in ..	9
films	743	Tomlin, S. G.—	
Spear, R. H.—		See Denton, R. E.	743
See Gardner, P. R.—	659	Upper atmosphere: electron density	
Spiegel, E. A.—		distribution about F_2 peak	293
See Van der Borgh, R.	703	Van der Borgh, R., Murphy, J. O., and	
Steiner, J. M.—		Spiegel, E. A.—	
See Bhatia, P. K.	259, 695	On magnetic inhibition of thermal	
Stewart, R. J. J.—		convection	703
See Thomson, J. E. M.	669	Wall, J. V.—	
Sulphur: 5.80 MeV state of ^{32}S ..	659	The spectra of sources in the $\pm 4^\circ$	
Sulphur, high pressure phases I and III,		declination zone of the Parkes	
indexing powder patterns for	335	2700 MHz survey.	
Sy, W. N.—		I. Spectra of individual sources ..	S24
See Melrose, D. B.	387	II. Statistical analysis	S24
Tandy, P. C.—		Abstract to S24	641
See McCarthy, I. E.	237	See also Schilizzi, R. T.	545
Thermodynamic treatment of anisotropic		Watts, R. O.—	
diffusion in electric field	685	See Fisher, R. A.	21, 529
Thies, H. H., Barrett, R. F., Lee, F.,		Snook, I. K.	735
Koch, R., Crawford, D. M., and		Whiteoak, J. B.—	
Thomas, B. W.—		The redshifts of 27 radio galaxies ..	233
Transformation of bremsstrahlung		Williamson, W., Jr.—	
photoneutron data to data correspond-		Optical potentials and eikonal	
ing to monochromatic gamma		approximations	643
excitation	361	Zuk, W. M.—	
Thomas, B. W.—		See Carlson, L. E.	673
See Thies, H. H.	361		
Thompson, M. N.—			
See Thomson, J. E. M.	669		