

C O N T E N T S

F V Atkinson:

- On the asymptotic behaviour of the Titchmarsh-Weyl m -coefficient and the spectral function for scalar second-order differential expressions 1

F V Atkinson and C T Fulton:

- Some limit circle eigenvalue problems and asymptotic formulae for eigenvalues 28

F V Atkinson, J R Haddock and O J Staffans:

- Integral inequalities and exponential convergence of solutions of differential equations with bounded delay 56

D L Barrow and P W Bates:

- Bifurcation of periodic travelling waves for a reaction-diffusion system .. 69

H Behncke:

- The Dirac equation with an anomalous magnetic moment II 77

V Benci, A Capozzi and D Fortunato:

- Periodic solutions of a class of Hamiltonian systems 86

P J Browne:

- Multiparameter problems : the last decade 95

R C Brown:

- An approach to the Dirichlet index for operators satisfying minimal conditions 110

J A Burns and E M Cliff and J M Amillo Gil

- Nonlinear neutral functional differential equations in product spaces 118

P A Clarkson and J B McLeod:

- A connection formula for the second Painlevé transcendent 135

D Colton:

- The inverse scattering problem for acoustic waves 143

J Dubois and P Morales:

- On the Hukuhara-Kneser property for some Cauchy problems in locally convex topological vector spaces 162

N X Đỗng:

- Essential self-adjointness and self-adjointness for generalized Schrödinger operators 171

<u>M S P Eastham:</u>	
Asymptotic theory for a critical class of fourth-order differential equations	179
<u>A Elbert:</u>	
Oscillation and nonoscillation theorems for some nonlinear ordinary differential equations	187
<u>D E Edmunds:</u>	
Entropy numbers, s-numbers and eigenvalues	213
<u>P C Fife and B Nicolaenko:</u>	
The singular perturbation approach to flame theory with chain and competing reactions	232
<u>J Fleckinger:</u>	
On the singular values of non-self-adjoint operators of Schrödinger type ..	251
<u>I M Gali:</u>	
Optimal control of systems governed by elliptic operator of infinite order	263
<u>V B Goyal and P W Schaefer:</u>	
Comparison principles for some fourth order elliptic problems	272
<u>R C Grimmer and W Schappacher:</u>	
Weak solutions of integrodifferential equations and applications	280
<u>D B Hinton and J K Shaw:</u>	
Titchmarsh's λ -dependent boundary conditions for Hamiltonian systems	298
<u>F A Howes:</u>	
Exterior boundary value problems for perturbed equations of elliptic type ..	318
<u>H G Kaper, C Gerrit Lekkerkerker and A Zettl:</u>	
Linear transport theory and an indefinite Sturm-Liouville problem	326
<u>R M Kauffman:</u>	
Non-normalizable eigenfunction expansions for ordinary differential operators	362
<u>H W Knobloch:</u>	
Some aspects and recent developments in linear control theory	368
<u>I W Knowles:</u>	
Eigenvalue problems and the Riemann zeta-function	388

M A Kon and L A Raphael:

- Superposition principles and pointwise evaluation of Sturm-Liouville eigenfunction expansions 406

K Kreith:

- Qualitative theory of hyperbolic characteristic initial value problems¹ 416

R T Lewis:

- Applications of a comparison theorem for quasi-accretive operators in a Hilbert space 422

L L Littlejohn and A M Krall:

- A singular sixth order differential equation with orthogonal polynomial eigenfunctions 435

S-O Londen:

- On the asymptotics of some Volterra equations with locally finite measures and large perturbations 445

J Mawhin:

- Periodic oscillations of forced pendulum-like equations 458

R C MacCamy and E Stephan:

- A simple layer potential method for three-dimensional eddy current problems 477

A C McBride:

- Index laws for some ordinary differential operators 485

P A McCoy:

- Converse initial value problems for a class of heat equations 494

J R McLaughlin:

- Higher order inverse eigenvalue problems 503

A B Mingarelli:

- Indefinite Sturm-Liouville problems 519

S E A Mohammed:

- The infinitesimal generator of a stochastic functional differential equation 529

M Nakao:

- On solutions to the initial-boundary problem for perturbed porous medium equation 539

F Neuman:

- A survey of global properties of linear differential equations of the
n-th order 548

D Pascali:

- Strongly nonlinear evolution variational inequalities 564

D Race:

- A further result on the essential spectrum of linear 2nth order
differential expressions with complex coefficients 569

R Rautmann:

- On error bounds for nonstationary spectral Navier-Stokes approximations ... 576

T T Read:

- Sectorial second order differential operators 584

H Röh:

- Spectral mapping theorems for dissipative C_0 -semigroup generators 591

D A Sánchez:

- Some preliminary results on periodic solutions of matrix Riccati equations 598

R Saxton:

- Solitary and travelling waves in a rod 603

K Seitz:

- Investigations in the theory of partial differential equations of infinite
order 609

J K Shaw and D B Hinton:

- Well-posed boundary problems for Hamiltonian systems of limit point or
limit circle type 614

K Soni:

- On uniform asymptotic expansion of a class of integral transforms 632

R L Sternberg, M J Goldstein and D Drinkard:

- On a new numerical method for a new class of nonlinear partial
differential equations arising in nonspherical geometrical optics 642

A Z-A M Tazali:

- Local existence theorems for ordinary differential equations of
fractional order 652

Tung Chin-Chu:

- Application of the theorem of connectivity of M^7 in astronomy 666

<u>L Turyn:</u>	
Perturbations of periodic boundary conditions	675
<u>A Vanderbauwhede:</u>	
Bifurcation problems with triangular symmetry	686
<u>J Walter:</u>	
On the foundations of thermodynamics	695
<u>A D Wood and R B Paris:</u>	
On some conjectures on the deficiency index for symmetric differential operators	703
<u>S D Wray:</u>	
On a second-order differential expression and its Dirichlet integral	710
<u>E M E Zayed:</u>	
An inverse eigenvalue problem for the Laplace operator	718