



## TABLE OF CONTENTS

|   |             |
|---|-------------|
| <b>Series editor's preface . . . . .</b>  | <b>v</b>    |
| <b>Editor's preface . . . . .</b>   | <b>ix</b>   |
| <b>List of participants . . . . .</b>   | <b>xi</b>   |
| <b>Welcome . . . . .</b>  | <b>xvii</b> |
| <b>Padé approximation and Rational interpolation . . . . .</b>  | <b>1</b>    |
| Integral approximants for functions of higher monodromic dimension<br>G. A. Baker Jr. . . . .                                       | 3           |
| Asymptotics of Hermite-Padé Polynomials and related convergence results<br>H. Stahl . . . . .                                       | 23          |
| <b>Rational approximation . . . . .</b>   | <b>55</b>   |
| On the behavior of zeros and poles of best uniform polynomial<br>and rational approximants<br>R. Grothmann and E. B. Saff . . . . . | 57          |
| Once again: the Adamjan–Arov–Krein approximation theory<br>J. Meinguet . . . . .  | 77          |
| Diagonal Padé approximants, rational Chebyshev approximants<br>and poles of functions<br>R. Kovacheva . . . . .                     | 93          |
| On the use of the Carathéodory–Féjer method for investigating '1/9'<br>and similar constants<br>A. P. Magnus . . . . .              | 105         |
| <b>Multidimensional and Multivariate problems . . . . .</b>   | <b>133</b>  |
| Simultaneous rational approximation to some q-hypergeometric functions<br>M. G. de Bruin . . . . .                                  | 135         |
| Minimal Padé-sense matrix approximations around $s = 0$ and $s = \infty$<br>M. Van Barel and A. Bultheel . . . . .                  | 143         |
| (Padé) <sub>y</sub> of (Padé) <sub>x</sub> approximants of $F(x, y)$<br>C. Chaffy . . . . .   | 155         |
| Different techniques for the construction of multivariate rational interpolants<br>A. Cuyt and B. Verdonk . . . . .                 | 167         |
| Rational approximants of hypergeometric series in $\mathbb{C}^n$<br>C. H. Lutterodt . . . . .                                       | 191         |

|  |            |
|--|------------|
| <b>Orthogonal polynomials and the Moment problem . . . . .</b>   | <b>211</b> |
| Some orthogonal systems of $p+1F_p$ -type Laurent polynomials<br>E. Hendriksen . . . . .   | 213        |
| The moment problem on equipotential curves<br>F. Marcellán and I. Pérez-Grasa . . . . .  | 229        |
| Difference equations, continued fractions, Jacobi matrices<br>and orthogonal polynomials<br>D. R. Masson . . . . .                                   | 239        |
| Multipoint Padé approximation and orthogonal rational functions<br>O. Njåstad . . . . .  | 259        |
| L-Polynomials orthogonal on the unit circle<br>W. J. Thron . . . . .   | 271        |
| <br><b>Continued fractions . . . . .</b>   | <b>279</b> |
| Schur's algorithm extended and Schur continued fractions<br>W. B. Jones . . . . .  | 281        |
| Some recent results in the analytic theory of continued fractions<br>H. Waadeland . . . . .  | 299        |
| Best a posteriori truncation error estimates for continued fractions $K(a_n/1)$<br>with twin element regions<br>W. B. Jones and W. M. Reid . . . . . | 335        |
| Convergence acceleration for Miller's algorithm<br>P. Levrie and R. Piessens . . . . .   | 349        |
| <br><b>Convergence acceleration . . . . .</b>  | <b>371</b> |
| A new approach to convergence acceleration methods<br>C. Brezinski . . . . .   | 373        |
| <br><b>Applications . . . . .</b>  | <b>407</b> |
| General T-fraction solutions to Riccati differential equations<br>S. C. Cooper, W. B. Jones and A. Magnus . . . . .                                  | 409        |
| A simple alternative principle for rational $\tau$ -method approximation<br>M. R. da Silva and M. J. Rodrigues . . . . .                             | 427        |
| Evaluation of Fermi-Dirac integral<br>S. Paszkowski . . . . .  | 435        |
| An application of operator Padé approximants to multireggeon processes<br>M. Pindor . . . . .  | 445        |
| <br><b>Index . . . . .</b>   | <b>453</b> |

