

# A Bibliography of Publications of Lloyd Nicholas Trefethen

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## Abstract

[KMM96]. **1997** [HWG98].

This bibliography records publications of **20.-26** [CMW84]. **2000** [vdVDE<sup>+</sup>02]. **25th** [Tre22c]. **27** [FSR98].

## Title word cross-reference

**5** [Böt06].

**75th** [GOR<sup>+</sup>08].

**\$100** [Tre02a].  $10^7$  [MT03]. **\$59.95** [Tre13b].  
 $\mathbf{A}_\alpha$ ,  $\log(\mathbf{A})$  [HHT08].  $e^z$  [Tre84a].  $\ell^p$   
[Tre84e].  $\varepsilon y'' - xy' + y = 0$  [Tre20b].  $x^n$   
[NT18].

**80th** [STW10].

**9** [Tre13b]. **978** [Tre13b].

**978-3-0348-0179-9** [Tre13b]. **'98** [ALM99].

**-instability** [Tre84e].

= [CMW82, CMW84].

**0** [Böt06]. **0-691-11946-5** [Böt06].

**AAA**

[CT23, DNT24, HT23, NST18, XWT24].

**100-Digit** [GI02, Tre02c, BLWW04, Tre02a].  
**100-Dollar** [GI02, Tre02c]. **14th** [GW91].  
**17th** [HWG98]. **1980** [Ano80]. **1981**  
[CMW82]. **1982** [W<sup>+</sup>83]. **1983**  
[CSW83, CMW84, GMSV84]. **1984** [VS84b].  
**1985** [MC87]. **1988** [MC90, MB88]. **1995**

**AAA-least** [CT23]. **absorbing**

[DT96, TH86a, TH86b, TH88]. **accuracy**

[Tre84a]. **Acta** [Ise99]. **Adaptive** [FNTB18].

**adaptively** [TT06]. **Advanced**

[DMLT84, DL85, LTS85, MN85, TLMD84,

TSL85, W<sup>+</sup>83]. **Advances** [VS84a, VS84b]. **AG** [Tre13b]. **aktuelle** [SL13]. **Algebra** [TB97b, TB22, Tre90]. **Algorithm** [NRT92b, NST18, NT20]. **Algorithms** [AKT14, MC87, MC90, PT09, MC87, MC90]. **Analogue** [RT11]. **analogues** [TT15]. **Analysis** [Ano80, BCC<sup>+</sup>79, SS03, TA84, Tre84b, ALM99, GW86, GW91, HWG98, LT88, SS93, Tre92a, W<sup>+</sup>83, ALM99]. **analyst** [JT98, TJ98]. **Analytic** [AKT14, PTK11, Tre20d, Tre23a]. **angle** [HT88]. **anniversary** [Tre22c]. **Apology** [Tre22a]. **application** [Tre80a, Tre81a]. **Applications** [MB88, SS03]. **Applied** [KMM96, Tre22a, Tre15b]. **Approach** [BET03, BET02]. **Approximate** [ADGP16]. **Approximation** [CSW83, CMW82, CMW84, FNTB18, GGT13, GT94, NST18, NT21, PTK11, Tre77, Tre90, Tre13a, Tre17a, Tre20a, Cor16, CT23, DNT24, GMSV84, GT82, GT83b, GT84, MC87, MC90, NT18, NT20, PT09, ST08, Tre81b, Tre81c, Tre81d, Tre83a, Tre83b, TG83c, TG83b, TG83d, TG83e, TG84, TG85, Tre86b, TG87, Tre17b, TNW21, VT11, XWT24, CSW83, CSW86, Cor16]. **Approximations** [ST07, Tre84b, GT83a, TG83a, Tre84a, TWS06]. **Approximationstheorie** [CMW82, CMW84]. **area** [BT01]. **Arithmetic** [AT15]. **Army** [Ano80]. **Arnoldi** [BNT21, GT94, TT96a]. **Arnoldi/Lánczos** [GT94]. **ARPACK** [WT01b]. **aspects** [W<sup>+</sup>83]. **association** [MB88]. **asymptotic** [Tre84a]. **August** [FSR98, W<sup>+</sup>83]. **automatic** [DBT08]. **Average** [TS87, TS90]. **Average-Case** [TS90]. **B** [BF81, Tre84b]. **Barycentric** [BT04b, FNTB18, WTG12, PT09]. **Based** [AKT14, MC87, MC90, MB88]. **Basel** [Tre13b]. **Bau** [Tre22c]. **Behavior** [Böt06, GT93, TE05, TG97]. **behaviour** [TV96, Tre99c]. **Berlin** [FSR98]. **best** [GT83a, PT09, TG83a, Tre84a]. **Bethlehem** [VS84b, VS84a]. **better** [Tre08]. **beyond** [TTRD92, Tre20e]. **bidiagonal** [TCE01]. **Biennial** [HWG98]. **bifurcation** [Tre23c]. **Bill** [STW10]. **Birkhäuser** [Tre13b]. **Birkhäuser/Springer** [Tre13b]. **birthday** [GOR<sup>+</sup>08, STW10]. **Block** [AT17a]. **blocks** [Tre84f]. **Book** [Böt06, Cor16, Tre84b, Tre13b, Tre15b]. **bound** [JT14]. **boundaries** [Tre85a, Tre85b]. **boundary** [DT96, Tre84c, Tre84d, TW86, TH86a, TH86b, TH88]. **Bowles** [Tre84b]. **Braunlage** [W<sup>+</sup>83]. **Brief** [KW02]. **Bromwich** [WT07b]. **Buffon** [WT94]. **bugs** [CLT11]. **Cage** [CHT15, Tre16b]. **Calculation** [ADGP16, TT96a]. **California** [Ano80]. **Carathéodory** [GT82, GST83, ST08, TG83c, VT11]. **card** [JT98, TJ98]. **cards** [TT00b, Tre11c]. **Case** [TS87, TS90]. **CF** [HTG90, Tre83b, Tre84f, Tre86b, THG90]. **chains** [JT98, TJ98]. **Challenge** [DHN<sup>+</sup>02, Kel02, Ker02a, Ker02b, MS02, MBvG02, SWRG02, Tre02a, Tre02b, Tre02c, BLWW04, Lau02, GI02, KW02]. **Chastened** [Tre02a]. **Chebfun** [DHT14, HT12, HT17, PT10, RT11, TT13, WJMT15, PT09]. **chebfuns** [PPT10]. **chebop** [DBT08]. **Chebyshev** [AT17b, GT82, GT83a, GT83b, GT84, TT06, TT98, Tre77, Tre81b, Tre81c, Tre81d, Tre83a, Tre83b, TG83a, TG83b, TG83d, TG83e, TG84, TG85, TG87]. **Chopping** [AT17b]. **Christoffel** [Tre80b, BT03, BF81, DT02, HT90, Tre80a, Tre80c, Tre81a, Tre89a, TD98]. **Circularity** [Tre83b, Tre81b, Tre81c]. **Classical** [ET86]. **Clenshaw** [Tre08, WT07a]. **clustering** [TNW21]. **coefficient** [Tre05]. **coefficients** [Tre23b, WT01a]. **College** [CSW83, MC87, MC90]. **collocation** [TT06]. **Companion** [TT94, Tre15b].

**Competitions** [SL11]. **Complex** [SS03, TT00a, Tre77, GT83b, GT84, NT20, SS93, TT99, Tre81b, Tre81c, Tre83b, TG83b, TG83d, TG83e, TG84, Tre13b, W<sup>+</sup>83]. **Computation** [Tre80a, Tre99a, WT01b, XWT24, Tre80b, Tre80c]. **Computational** [MB88, W<sup>+</sup>83]. **computations** [EOS85]. **Computed** [TB06]. **Computer** [Tre81a, TD98, VS84b, VS84a]. **Computers** [Ano80]. **Computing** [AT15, HHT08, ST07, TW06, Tre07, Tre15a, WT01a, PT10, WT07b]. **Condition** [VT98, LT84]. **Conditioned** [Tre20b]. **conditioning** [Tre20d]. **conditions** [TW86, TH86a, TH86b, TH88]. **Conference** [Ano80, GW91, HWG98, MC87, MC90, GMSV84, MB88, STW10, vdVDE<sup>+</sup>02]. **Conformal** [ET99a, TW86, Tre86c, Tre20c, GT19b, HT08, TA84, Tre86e, Tre93]. **Congress** [FSR98, KMM96]. **Connected** [ET99a]. **constants** [WT01a]. **construction** [Tre93]. **containing** [Tre85a]. **continuation** [Tre20d, Tre23a]. **Continuous** [BT04a, BET03, TT15, BET02]. **continuum** [DNT24]. **Contour** [ST07, HHT08, ST08]. **Contours** [WT06, WT07b]. **Convection** [RTP93, RT94]. **Convection-Diffusion** [RT94]. **convergence** [JT14, TG85]. **Convergent** [TW14]. **Copper** [vdVDE<sup>+</sup>02]. **Corner** [GT19c]. **Couette** [TTR92]. **CR** [GT94]. **Cubature** [Tre17a]. **current** [SL13]. **Curtis** [Tre08, WT07a]. **curve** [Tre81b, Tre81c, Tre83b]. **cutoff** [JT98, TJ98].

**Data** [MC87, HT23]. **decay** [ET99b]. **December** [GMSV84]. **deck** [TT00b]. **dedicated** [GOR<sup>+</sup>08]. **definition** [Tre92a]. **degeneracy** [TG85]. **derivative** [TW86]. **design** [GST83, TA84]. **Determine** [GT93, TG97]. **Difference** [Tre82a, Tre82b, Tre84e, Tre84c, Tre84d, Tre85a, Tre85b]. **differential** [DBT08, Tre05, VS84b, VS84a]. **differentiation** [WT88]. **Diffusion** [RTP93, RT94]. **Digit** [DHN<sup>+</sup>02, GI02, KW02, MS02, SWRG02, Tre02b, Tre02c, BLWW04, Kel02, Ker02a, Ker02b, Lau02, Tre02a, Tre11b, Tre13c]. **digital** [GST83]. **dimensional** [BT97, TB97a, XWT24]. **Dimensions** [HT17, TT13, DET87]. **direction** [TTRD92]. **discontinuities** [Tre84e]. **discrete** [RT90]. **Discretizations** [AT17a]. **disk** [GT83a, GT83b, Tre81d, Tre83a, TG83a, TG83b, TG83d, Tre84a]. **Dispersion** [Tre86a, Tre84e]. **dissipation** [Tre86a]. **Do** [GT93, TG97]. **Dollar** [GI02, KW02, MS02, SWRG02, Tre02b, Tre02c, Kel02, Ker02a, Ker02b, Lau02]. **Domain** [TT00a, TT99]. **Domains** [ET99a, GT84, TG84]. **Dundee** [GW91, HWG98]. **dynamics** [MB88].

**E.** [BF81]. **Editor** [Kel02]. **eigenmodes** [TB06]. **Eigenvalue** [ET01a, HNT22, Tre88]. **Eigenvalues** [AT15, HT01, RT92b, TR92b, TH97, RT90, TTRD92, TTRD93, WT88]. **Eight** [Tre20b]. **eigs** [WT01b]. **Einblicke** [SL13]. **Einladung** [SL13]. **Elias** [Tre13b]. **Elimination** [TS87, TS90, Tre85c]. **elongated** [HT90]. **Embree** [Böt06]. **Engineering** [SS03, SS93]. **EPSRC** [ALM99]. **equally** [TW91]. **Equation** [Tre20b, DT96, TW86]. **equations** [DBT08, HT88, TH86a, TH86b, VS84b, VS84a, Tre84b]. **equations-V** [VS84a]. **equioscillation** [Tre84f]. **Equispaced** [PTK11, HT23]. **era** [TD98]. **Erratum** [Tre80b]. **error** [JT14, Tre81c, Tre83b]. **Euler** [JT14, JT16]. **Evaluating** [ST08]. **evolution** [TTR92]. **Exactness** [Tre22b]. **expansion** [Tre23b]. **Exploring** [TBD18]. **Exponential** [TNW21, ST08]. **Exponentially** [TW14, Tre20b]. **Extension** [BT04a, TT13, WJMT15]. **extrapolation** [WTG12].

**factorizations** [TT15]. **Faraday**

- [CHT15, Tre16b]. **Fast**  
 [NRT92a, PTK11, TW06]. **February**  
 [Ano80]. **Fejér**  
 [GT82, GST83, ST08, TG83c, VT11, WT07a].  
**Fibonacci** [ET99b]. **Field** [Ano80]. **Fifth**  
 [VS84b, VS84a]. **filter** [GST83]. **Filters**  
 [AT15]. **Finite** [Tre82a, Tre82b, Tre84e,  
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 [Tre85a, Tre85b]. **Florida** [GMSV84]. **flow**  
 [DET87, ET86, MT03, Tre94, TTS99]. **flows**  
 [TTR92, XWT24]. **fluid**  
 [EOS85, MB88, TP90]. **formula** [JT14].  
**Formulas** [Tre22b, HT08, WTG12].  
**Forschung** [SL13]. **forty** [Tre11c]. **Four**  
 [CLT11]. **Fourier** [LT88, Tre84b]. **Fourth**  
 [KT05]. **Fourth-Order** [KT05]. **free** [ET86].  
**free-streamline** [ET86]. **fully** [RT90].  
**Function** [AKT14, RT11, ST07, BT01].  
**Functions** [BT04a, ET99a, FJT19, GT19c,  
 HHT23, HT24, MC87, PTK11, Tre20c,  
 WJMT15, GT19b, HHT08, JT14, ST08,  
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**Fundamentals** [SS93, SS03].
- Gamma** [ST07]. **Gateway** [ET01b]. **Gauss**  
 [Tre08]. **Gaussian**  
 [ADGP16, FJT19, Tre85c, TS87, TS90].  
**Gene** [GOR<sup>+</sup>08]. **General** [TT00a, TT99].  
**Generalizing** [ET01a]. **geometric** [JT14].  
**German** [SL13, Tre13c]. **Germany**  
 [KMM96, W<sup>+</sup>83]. **GMRES**  
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**Golub** [GOR<sup>+</sup>08]. **graduate** [ALM99].  
**Green** [ET99a]. **Gregory** [JT16]. **grid**  
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 [ET99b]. **Guide**  
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**Gustafsson** [Tre83c].
- Hadamard** [TV96]. **Hamburg** [KMM96].  
**Harz** [W<sup>+</sup>83]. **held**  
 [CSW83, GMSV84, KMM96, MC87, MC90,  
 MB88, VS84b, VS84a, W<sup>+</sup>83]. **Helmholtz**  
 [GT19a]. **Householder** [Tre10]. **hp** [HT24].
- hp-Mesh** [HT24]. **Hundred**  
 [DHN<sup>+</sup>02, KW02, Kel02, Ker02a, Ker02b,  
 Lau02, MS02, SWRG02, Tre02b].  
**Hundred-Digit** [KW02, MS02, SWRG02,  
 Tre02b, Kel02, Ker02a, Ker02b, Lau02].  
**Hundred-Dollar** [KW02, MS02, SWRG02,  
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**Hybrid** [NRT92b]. **Hydrodynamic**  
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**Hypercube** [Tre17a, Tre17b].
- ICIAM** [KMM96]. **Ideal** [DET87]. **II**  
 [MC90, ADGP16]. **III** [MB88]. **III**  
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**Ill-posedness** [TH88]. **IMA** [MC87].  
**IMACS** [VS84b, VS84a]. **implementation**  
 [VT11]. **Impossibility** [PTK11]. **index**  
 [Tre11c]. **Industrial** [KMM96]. **Infinity**  
 [BET03, BET02]. **influence** [BF81]. **initial**  
 [Tre84c, Tre84d]. **initial-boundary** [Tre84c].  
**insights** [SL13]. **Instability**  
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**instead** [Tre07, Tre15a]. **Institute**  
 [MB88, W<sup>+</sup>83]. **instruments** [HT01, TH97].  
**integral** [WT07b]. **Integrals**  
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**interfaces** [Tre85a]. **International**  
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**Isotropy** [Tre17a]. **issue** [Tre86e]. **iteration**  
 [LT88, TT96a]. **Iterations**  
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- J** [Tre84b]. **Januar** [CMW82]. **January**

[CSW83, CMW82]. **jet** [DET87]. **July** [KMM96, MC87, MC90, W<sup>+</sup>83]. **June** [GW91, HWG98, VS84b, VS84a].

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**L.** [Cor16]. **Lagrange** [BT04b]. **Lánczos** [GT94]. **Laplace** [CT23, GT19a, GT19c, TW86, Tre18, WT06]. **Large** [EOS85, WT01b, Tre23b]. **Large-Scale** [WT01b, EOS85]. **law** [Tre23c]. **Lax** [RT90, Tre88]. **Lax-stability** [RT90, Tre88]. **least** [CT23, GPT11]. **least-squares** [GPT11]. **lecture** [ALM99]. **Lehigh** [VS84b, VS84a]. **Letter** [Kel02]. **Library** [BCC<sup>+</sup>79]. **Lightning** [BT22, XWT24]. **Linear** [NRT92b, TB97b, Tre97, TB22, BDT95, Tre90, TTR92, Tre96]. **Linearized** [MT03]. **lines** [RT92a, TR92a]. **Lloyd** [Böt06]. **localization** [TCE01]. **Log** [NT21]. **looks** [JT98, TJ98]. **Low** [BT97, TB97a]. **Low-dimensional** [BT97, TB97a]. **Lyapunov** [WT01a].

**M** [CSW83]. **Maclaurin** [JT14, JT16]. **many** [TT00b]. **Mapping** [BT03, ET99a, Tre86c, Tre20c, DT02, TA84, TW86, Tre86e, Tre89a, TD98]. **maps** [GT19b, HT08, Tre93]. **March** [CMW84, MB88]. **Mark** [Böt06]. **Markov** [JT98, TJ98]. **März** [CMW84]. **Mathematician** [Tre22a]. **Mathematicians** [FSR98]. **Mathematics** [CHT15, KMM96, MB88, SL11, BF81, SS93, SL13, Tre11c, Tre15b]. **Mathematik** [SL13]. **MATLAB** [BT04a, Tre86b, TT<sup>+</sup>96b, TMC<sup>+</sup>99, Tre00a]. **Matrices** [AT15, BET03, Böt06, TT94, TE05, VT98, BET02, RT92b, TR92b, Tre92b, Tre99c, TCE01, TC04, WT88, WT02]. **Matrix** [DTT98, GT93, GT94, LT84, NRT92a, TT98, TT00a, TV96, HHT08, ST08, TT99, TT15, TG97, TDTxx, WT94]. **mechanics** [EOS85, TP90]. **Mesh** [HT24]. **Method** [BT03, BT05, GT82, GST83, RT92a, TT06, Tre83b, TG83c, TR92a, VT11]. **Methoden** [CMW82, CMW84]. **Methods** [CMW82, CMW84]. **migration** [TH88]. **Military** [MC87, MC90]. **Minimax** [FNTB18, NT20]. **Misjudged** [Tre02a]. **model** [BDT95]. **models** [BT97, Tre84c, Tre84d, Tre85a, Tre85b, TB97a]. **modified** [HT90]. **Moffett** [Ano80]. **Moore** [Tre23c]. **Morton** [STW10]. **mostly** [BDT95]. **Mountain** [vdVDE<sup>+</sup>02]. **MR3380576** [Tre15b]. **MultiMATLAB** [TT<sup>+</sup>96b, TMC<sup>+</sup>99]. **Multiple** [TMC<sup>+</sup>99, TT<sup>+</sup>96b]. **Multiply** [ET99a]. **Multipole** [BT03]. **Multiscale** [HT24]. **Multivariate** [Tre17b]. **Müntz** [Tre23b]. **musical** [HT01, TH97]. **mysteries** [Tre85c]. **myths** [Tre11a].

**N** [Böt06, Cor16]. **NAPLUG** [BCC<sup>+</sup>79]. **NATO** [W<sup>+</sup>83]. **Navier** [TTR92]. **Near** [Tre81b, Tre81c]. **Near-circularity** [Tre81b, Tre81c]. **needle** [WT94]. **node** [TNW21]. **non** [Tre99c]. **non-normal** [Tre99c]. **Nonhermitian** [Tre06]. **Nonnormal** [Böt06, TE05]. **Nonsymmetric** [NRT92a, NRT92b]. **Nonuniqueness** [GT83a, TG83a]. **normal** [Tre99c]. **notes** [ALM99, Tre11c]. **number** [MT03]. **Numbers** [VT98, Tre07, Tre15a]. **numerica** [Ise99]. **Numerical** [Ano80, AKT14, BT01, BCC<sup>+</sup>79, CMW82, CMW84, GW86, GW91, Tre80b, Tre80c, Tre84b, Tre86c, Tre93, TB97b, Tre20c, TB22, Tre23a, ALM99, HT12, JT98, MB88, PT10, Tre86e, Tre90, Tre92a, TJ98, HWG98, MB88]. **numerically** [Tre07, Tre15a]. **Numerische** [CMW82, CMW84].

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- [TW86]. **obstacle** [ET86]. **occasion** [GOR<sup>+</sup>08, Tre22c]. **ODEs** [FJT19, HT93, TBD18]. **omitted** [BT01]. **one** [HT88, Tre85b, TH86a, TH86b]. **one-way** [HT88, TH86a, TH86b]. **Operator** [RTP93, RT94, TTR92]. **Operators** [AT17a, BT04a, BET03, Böt06, Tre97, TE05, BET02, Tre96, Tre99c, Tre05]. **Optimizing** [WT06]. **Order** [KT05, WT88]. **organized** [MB88]. **other** [JT98, TJ98]. **Oxford** [Böt06, MB88].
- packet** [TC04, Tre05]. **Padé** [GGT13, Tre84f, TG85, TG87]. **pages** [Böt06]. **Parabolic** [WT07b]. **partial** [VS84b, VS84a]. **Particular** [BT05]. **PDE** [NT21]. **PDEs** [KT05, TNW21]. **Pennsylvania** [VS84b, VS84a]. **people** [Tre11c]. **Periodic** [WJMT15, JT14]. **Perspectives** [Tre20b]. **Perturbed** [AT17c]. **phase** [Tre13b]. **Phenomenon** [TT87, JT98, TJ98, WT07a]. **physical** [BF81]. **Piecewise** [BET02, BET03, PPT10]. **Piecewise-smooth** [PPT10]. **pipe** [MT03, Tre94, TTS99]. **Planar** [NT21, TB06]. **Plane** [Tre77, TTR92]. **Points** [AT17c, TT06, TW91]. **Poiseuille** [TTR92, Tre94, TTS99]. **polygon** [TW86]. **polygonal** [ET86, TA84]. **Polygons** [BT03]. **polynomial** [GT82, PT09, TW91, Tre11a, Tre17b]. **Polynomials** [TT94, TT98, Tre77]. **portraits** [Tre13b]. **posedness** [TH86a, TH86b, TH88]. **Potential** [DTT98, TDTxx]. **pp** [Tre13b]. **Practice** [Tre13a, Tre20a, Cor16]. **Preface** [GOR<sup>+</sup>08, Tre86d]. **Press** [Böt06]. **Princeton** [Böt06, Tre15b]. **problem** [BT01, WT94]. **Probleme** [Tre13c]. **Problems** [DMLT84, DL85, GT19c, GT94, LTS85, MN85, TLMD84, TSL85, CT23, HNT22, Lau02, Tre84c, Tre84d, Tre11b, Tre13c, Tre18]. **proceedings** [CSW83, GMSV84, GW91, HWG98, KMM96, MC87, MC90, MB88, VS84b, VS84a, W<sup>+</sup>83, Ano80, FSR98]. **Processes** [FJT19]. **Processors** [TMC<sup>+</sup>99, TT<sup>+</sup>96b]. **products** [TV96]. **Program** [BCC<sup>+</sup>79]. **programs** [Tre86b]. **Propagation** [Tre82b]. **pseudo** [RT90, RT92b, TR92b]. **pseudo-eigenvalues** [RT90, RT92b, TR92b]. **pseudomodes** [TC04, Tre05]. **Pseudospectra** [Böt06, DT96, ET01a, ET01b, GT93, RT94, TT94, TTR92, Tre92b, Tre96, Tre97, Tre99b, TE05, WT01b, WT02, TT96a, Tre94, TG97, Tre99a, Tre99c, TTS99, TCE01, Tre06]. **Pseudospectrum** [RTP93]. **Pseudozeros** [TT94].
- Quadrature** [ADGP16, AT17c, Tre22b, HT08, HT12, Tre08, Tre11a, TNW21, WT07a]. **quadratures** [TWS06]. **Quantifying** [Tre20d]. **quasimatrix** [Tre10]. **questions** [TP90].
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