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21 April 2018

Z. Vasagh and M. S. Moslehian
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Ferdowsi University of Mashhad
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Article elements

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- References
- Affiliation

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Title

Only the first word, the first word after a colon, and proper nouns should be capitalized.

Strong preference is to break before any prepositions, articles, or conjunctions, or logically within or around phrases. Avoid only one word on the last line.

Title

- HYBRIDIZABLE DISCONTINUOUS GALERKIN AND MIXED FINITE ELEMENT METHODS FOR ELLIPTIC PROBLEMS ON SURFACES

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Title

- ▶ HYBRIDIZABLE DISCONTINUOUS GALERKIN AND MIXED FINITE ELEMENT METHODS FOR ELLIPTIC PROBLEMS ON SURFACES
- ✗ HYBRIDIZABLE DISCONTINUOUS GALERKIN AND MIXED FINITE ELEMENT METHODS FOR ELLIPTIC PROBLEMS ON SURFACES

Title

- ▶ HYBRIDIZABLE DISCONTINUOUS GALERKIN AND MIXED FINITE ELEMENT
  METHODS FOR ELLIPTIC PROBLEMS ON SURFACES
- ✗ HYBRIDIZABLE DISCONTINUOUS GALERKIN AND MIXED FINITE ELEMENT
  METHODS FOR ELLIPTIC PROBLEMS ON SURFACES
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Title

NORM ESTIMATES FOR RESOLVENTS OF LINEAR OPERATORS IN A BANACH SPACE AND SPECTRAL VARIATIONS

Figure: Sample article

NORM ESTIMATES FOR RESOLVENTS OF LINEAR OPERATORS IN A BANACH SPACE AND SPECTRAL VARIATIONS

Figure: Edited article

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Authors

Do not use et al. within the author line; that is, all author names must appear here.

There is a period after each initial in an abbreviated hyphenated name

There is a comma before and with three authors or more.

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Iran

Authors

✗ V.A. Sohinger

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Authors

✗ V.A. Sohinger

✓ V. A. Sohinger

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Authors

- ✗ V.A. Sohinger
- ✓ V. A. Sohinger
- ✗ Author One, Author Two and Author Three

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Authors

- ✗ V.A. Sohinger
- ✓ V. A. Sohinger
- ✗ Author One, Author Two and Author Three
- ✓ Author One, Author Two, and Author Three

Authors

FIRST, AUTHOR[1], SECOND, AUTHOR[2] and THIRD AUTHOR[3*]

Figure: Sample article

FIRST AUTHOR[1], SECOND AUTHOR[2], and THIRD AUTHOR[3*]

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Abstract

An abstract must be able to stand alone, independent of the paper.

Abstracts cannot have numbered displays.

For journal article references, insert (in all lightface roman text) the journal abbreviation, volume, year, and page numbers, but not the article title. For book references, insert the title, publisher, location of publisher, and year. Only book titles appear in italics.

If the acronym does not appear again in the abstract, spell it out and delete the acronym itself. Acronyms defined in the abstract must be defined again on first occurrence in the body of the paper.

Abstract

- **Abstract**.Matsusaka and Osanai [Proc. Amer. Math. Soc. 145 (2017), pp. 1383–1392] give arithmetic formulas for the coefficients of Hauptmoduln of higher levels as analogues of Kanekos formula for the j-invariant.
- **Abstract**. We study the velocity of travelling waves of a reaction-diffusion system and show that it grows like the square root of the diffusivity on the line. This generalizes a result of Berestycki, Roquejoffre, and Rossi [The influence of a line with fast diffusion on Fisher-KPP propagation, Princeton University Press, Princeton, NJ, 2014].
- **Abstract**. The main challenge of obtaining the differentiability of the semiflow is to determine the right type of differentiability and the right phase space (see V. Andreasen [Semiflows generated by Lipschitz perturbations of non-densely defined operators, Springer-Verlag, Berlin, 1989, pp. 14–151]).

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Abstract

ABSTRACT. Given positive invertible operators A, B on a Hilbert space $\mathcal{H}$, and $0 \leq \mu \leq 1$, we obtain some useful identities involving the means $A\nabla_\mu B$, $A\sharp_\mu B$ and $A!\mu B$. We then prove that if $0 < A, B \leq \frac{1}{2}I$ then

$$A'\nabla_\mu B' - A'\sharp_\mu B' \leq A\nabla_\mu B - A\sharp_\mu B \qquad (0.1)$$

where I is the identity operator on $\mathcal{H}$, $A' := I - A$, and $B' := I - B$.

Figure: Sample article

ABSTRACT. Given positive invertible operators A and B on a Hilbert space $\mathcal{H}$ and $0 \leq \mu \leq 1$, we obtain some useful identities involving the means $A\nabla_\mu B$, $A\sharp_\mu B$, and $A!\mu B$. We then prove that if $0 < A, B \leq \frac{1}{2}I$, then

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Mathematics Subject Classification

At least one primary subject classification number is required.

Secondary numbers may also be included and are optional.

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@Matheditor

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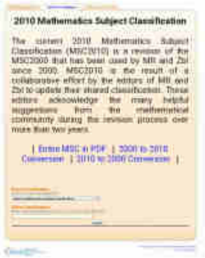
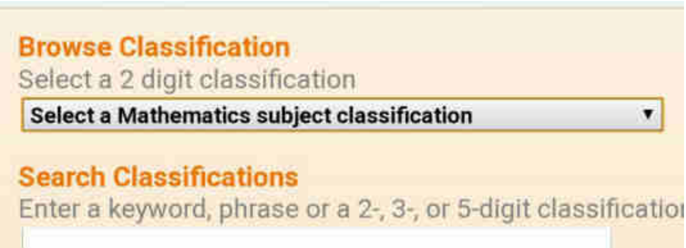
- https://mathscinet.ams.org/msc/msc2010.html



2010 Mathematics Subject Classification

The current 2010 Mathematics Subject Classification (MSC2010) is a revision of the MSC2000 that has been used by MR and Zbl since 2000. MSC2010 is the result of a collaborative effort by the editors of MR and Zbl to update their shared classification. These editors acknowledge the many helpful suggestions from the mathematical community during the revision process over more than two years.

| Entire MSC in PDF | 2000 to 2010 Conversion | 2010 to 2000 Conversion |



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Running heads

The right running head contains the title. Shorten the title for the running head if the full title is too long.

The left running head contains the author name(s) and should appear as in the byline. If a shortened form is needed for the running head, change to initials for the first and middle names. If still too long, use only the first authors name followed by “et al.”; no comma precedes “et al.”.

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- Line dots (ldots) are used between variables with other punctuation.

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Editing text

- Line dots (ldots) are used between variables with other punctuation.
- Centered dots (cdots) are used between operators and relations.

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a.a.	almost always
a.e.	almost everywhere
a.s.	almost surely
a priori	formed or conceived beforehand, presumed
cf.	compare (*confer*, never c.f.; not a substitute for "see")
e.g.	for example (*exempli gratia*; not a substitute for "i.e.")
et al.	and others (*et alii*, *et alia*)
etc.	and so forth (*et cetera*)
ibid	in the same place (*ibidem*)
i.e.	that is (*id est*; not a substitute for "e.g.")
iff	if and only if
loc. cit.	in the place cited (*loco citato*)
op. cit.	in the work cited (*opere citato*, but try to avoid this)
viz.	namely (*videlicet*)
w.r.t. or wrt	with respect to
w.l.o.g. or wlog	without loss of generality

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Sample article

1. Introduction and Notation

The GMRES [7] is one of most popular Krylov subspace methods for solving system. Another method is Quasi-Minimal Residual method (QMR) which has low storage rather than GMRES. For symmetric positive definite matrix A, Saad et. al. [8] describe a deflated version of the CG algorithm. Also, Vuik et. al.[9] applied deflated CG for the solution of a class of layered problems. For nonsymmetric systems Chapman and Saad [1] and Morgan [6, 4, 5] proposed augmentation of Krylov subspaces generated by restarted GMRES method .

Let $n \geq 2$ and $\mu_1, \dots, \mu_n \geq 0$ such that $\sum_{i=1}^{n} \mu_i = 1$. For arbitrary real numbers $x_1, \cdots, x_n > 0$, we denote by A_n, G_n and H_n the arithmetic, geometric and harmonic means of $x_1, \cdots, x_n$ respectively, i.e.,

$$A_n = \sum_{i=1}^{n} \mu_i x_i, \qquad G_n = \prod_{i=1}^{n} x_i^{\mu_i}, \qquad H_n = \frac{1}{\sum_{i=1}^{n} \mu_i \frac{1}{x_i}}. \tag{1.1}$$

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Let $n \geq 2$, and let $\mu_1, \ldots, \mu_n \geq 0$ be such that $\sum_{i=1}^{n} \mu_i = 1$. For arbitrary real numbers $x_1, \ldots, x_n > 0$, we denote by A_n, G_n, and H_n the arithmetic, geometric, and harmonic means of $x_1, \ldots, x_n$, respectively; that is,

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Let $P_{s+1}^T = [\epsilon_1, \epsilon_2, \ldots, \epsilon_n]$ for $s \leq m$ denotes the permutation matrix obtain after s steps of the modified Hessenberg process, then $L_{s+1} = P_{s+1}L_{s+1}$ is a lower trapezoidal matrix. Since $PAU_k = 0$, PA is singular, hence it is important to analyse the possibilities of a break down .

Figure: Sample article

Let $P_{s+1}^T = [\epsilon_1, \epsilon_2, \ldots, \epsilon_n]$, for $s \leq m$, denote the permutation matrix obtained after s steps of the modified Hessenberg process; then $L_{s+1} = P_{s+1}L_{s+1}$ is a lower trapezoidal matrix. Since $PAU_k = 0$, PA is singular, and hence it is important to analyze the possibilities of a break down.

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Hyphen

- Hyphenate words formed with the suffix “-type”.
  a Newton-type method, a Cauchy–Schwarz-type equation
- Hyphenate words formed with prefixes before a proper noun.
  non-Hermitian

When not to hyphenate.

- Do not hyphenate words formed with the prefixes “ante-”, “anti-”, “bi-”, “counter-”, “de-”, “equi-”, “extra-”, “infra-”, “inter-”, “intra-”, “macro-”, “micro-”, “mid-”, “mini-”, “multi-”, “non-”, “over-”, “pre-”, “post-”, “pro-”, “pseudo-”, “pre-”, “semi-”, “sub-”, “super-”, “supra-”, “trans-”, “tri-”, “ultra-”, “un-”, “under-”.
- Do not hyphenate words formed with the suffixes “-fold”, “-hood”, “-less”, “-wise”.
- Do not hyphenate “th” expressions: xth, not x-th or x^{th}.

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En Dash

- The en dash (–) is most commonly used to express a range of numbers.
  equations (2.2)–(2.6), pp. 342–348
- Use an en dash between two author names joined in an adjectival construction.
  the Smith–Jones formula, the Birch–Swinnerton-Dyer conjecture

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2. RESULTS

Theorem 2.1 ([3]). *Suppose A,* $B \in \mathfrak{B}(\mathcal{H})$ *with* $A \geq B$ *and* $A - B$ *is compact operator. Then second equality (1.1) holds if and only if* $A = B$, $j = 1, 2, \ldots$

Proof. Since $A - B$ nonnegative operator there exists constants $c_1, c_2 > 0$ such that $c_1 A \in c_2 B$ and hence Tomita-Takesaki Theory complete proof. □

Figure: Sample article

2. RESULTS

Theorem 2.1 (see [3, p. 20]). *Suppose that* $A, B \in \mathfrak{B}(\mathcal{H})$ *are such that* $A \geq B$ *and that* $A - B$ *is a compact operator. Then the second equality (1.1) holds if and only if* $A = B$ *for all* $j = 1, 2, \ldots$.

Proof. Since $A - B$ is a non-negative operator, there exist constants $c_1, c_2 > 0$ such that $c_1 A \leq c_2 B$. Hence the Tomita–Takesaki theory completes the proof. □

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The above identities will be frequently used in the sequel. A proper CQ^*-algebra can be obtained by completing of a C^*–algebra. Indeed, we have

Theorem 2.2. *Let (A, A_0) be a $*$-semi-simple Banach quasi $*$-algebra with unit e. Then every element $a \in A$ is closable and the following statements are equivalent:*
(i) the element a has a bounded inverse a^{-1}.
(ii) Both $\overline{L}_a$ and $\overline{R}_a$ possess everywhere defined (hence, bounded) inverses.

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$$\Delta_{S^N} f_\varepsilon(\theta) \leq \Big(\frac{d^2}{d\theta^2} + (N-1)\cot\theta \frac{d}{d\theta}\Big)\Big(H\Big(\frac{\theta}{\varepsilon}\Big)\theta^{\frac{2-N}{p}}\Big) \tag{2.1}$$

$$= H\Big(\frac{\theta}{\varepsilon}\Big)\Big(\Big(\frac{2-N}{p}\Big)\Big(\frac{2-N-p}{p}\Big)\theta^{\frac{2-N-2p}{p}} \tag{2.2}$$

$$+ (N-1)\Big(\frac{2-N}{p}\Big)\theta^{\frac{2-N-p}{p}} \cot\theta\Big) \tag{2.3}$$

$$+ \frac{1}{\varepsilon}H'\Big(\frac{\theta}{\varepsilon}\Big)\Big(\frac{2(2-N)}{p}\theta^{\frac{2-N-p}{p}} + (N-1)\theta^{\frac{2-N}{p}}\cot\theta\Big) \tag{2.4}$$

Now, applying [1, Theorem 4.2] and Theorem 2.1 and Theorem 2.2 imply following Theorem which summarizes the results for positive operators see e.g. [3, Thm. 2].

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$$
\begin{aligned}
\Delta_{g_N} f_\varepsilon(\theta) &\le \left(\frac{d^2}{d\theta^2} + (N-1)\cot\theta\frac{d}{d\theta}\right)\left(H\left(\frac{\theta}{\varepsilon}\right)\theta^{\frac{2-N}{p}}\right)\\
&= H\left(\frac{\theta}{\varepsilon}\right)\left(\left(\frac{2-N}{p}\right)\left(\frac{2-N-p}{p}\right)\theta^{\frac{2-N-2p}{p}}\right.\\
&\qquad \left. + (N-1)\left(\frac{2-N}{p}\right)\theta^{\frac{2-N-p}{p}}\cot\theta\right)\\
&\quad + \frac{1}{\varepsilon}H'\left(\frac{\theta}{\varepsilon}\right)\left(\frac{2(2-N)}{p}\theta^{\frac{2-N-2}{p}} + (N-1)\theta^{\frac{2-N}{p}}\cot\theta\right).
\end{aligned}
$$

Now, applying Theorem 4.2 of [1] and Theorems 2.1 and 2.2 implies the following theorem which summarizes the results for "positive" operators; see, for example, [3, Thm. 2].

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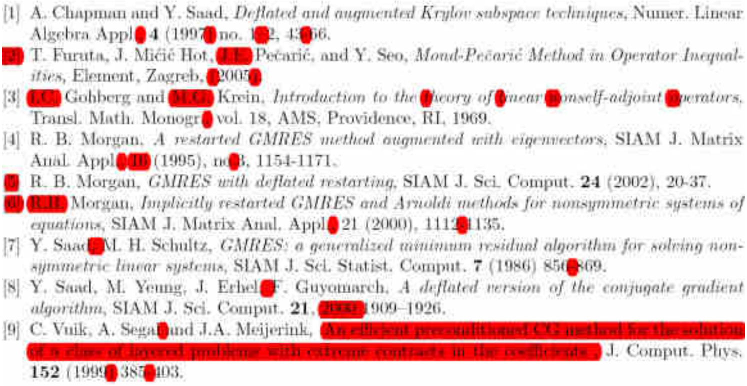
References



[1] A. Chapman and Y. Saad, *Deflated and augmented Krylov subspace techniques*, Numer. Linear Algebra Appl. 4 (1997), no. 1, 43–66.

[2] T. Furuta, J. Mićić Hot, J.E. Pečarić, and Y. Seo, *Mond-Pečarić Method in Operator Inequalities*, Element, Zagreb, (2005).

[3] I.C. Gohberg and M.G. Krein, *Introduction to the theory of linear nonself-adjoint operators*, Transl. Math. Monogr. vol. 18, AMS, Providence, RI, 1969.

[4] R. B. Morgan, *A restarted GMRES method augmented with eigenvectors*, SIAM J. Matrix Anal. Appl. 16 (1995), no. 4, 1154-1171.

[5] R. B. Morgan, *GMRES with deflated restarting*, SIAM J. Sci. Comput. **24** (2002), 20-37.

[6] R.B. Morgan, *Implicitly restarted GMRES and Arnoldi methods for nonsymmetric systems of equations*, SIAM J. Matrix Anal. Appl. 21 (2000), 1112–1135.

[7] Y. Saad, M. H. Schultz, *GMRES: a generalized minimum residual algorithm for solving nonsymmetric linear systems*, SIAM J. Sci. Statist. Comput. **7** (1986) 856–869.

[8] Y. Saad, M. Yeung, J. Erhel, F. Guyomarch, *A deflated version of the conjugate gradient algorithm*, SIAM J. Sci. Comput. **21**, (2000) 1909–1926.

[9] C. Vuik, A. Segal and J.A. Meijerink, An efficient preconditioned CG method for the solution of a class of layered problems with extreme contrasts in the coefficients, J. Comput. Phys. **152** (1999), 387–403.

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References

[1] A. Chapman and Y. Saad, *Deflated and augmented Krylov subspace techniques*, Numer. Linear Algebra Appl. **4** (1997), no. 1-2, 43–66.

[2] T. Furuta, J. Mićić Hot, J. E. Pečarić, and Y. Seo, *Mond-Pečarić Method in Operator Inequalities*, Element, Zagreb, 2005.

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Ferdowsi Uni. of Mashhad
Iran

Affiliation

[1]Department of Statistics, Ordered and Spatial Data Center of Excellence, Ferdowsi University of Mashhad, Mashhad, Iran.
E-mail address: F.autor@um.ac.ir

[2]Department of Applied Mathematics, Ferdowsi University of Mashhad, Iran.
E-mail address: S.autor@yahoo.com

[3]Department of Pure Mathematics, Ferdowsi University of Mashhad, P. O. Box 1159, Mashhad 91775, Iran.
E-mail address: T.Autor@gmail.com

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Contact Information

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Z. Vasagh and M. S. Moslehian
Telegram:09366263106 @Matheditor
mathemathiceditor@gmail.com
Attendance: Saturday 9–12
Editor's Office (Room 527)
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