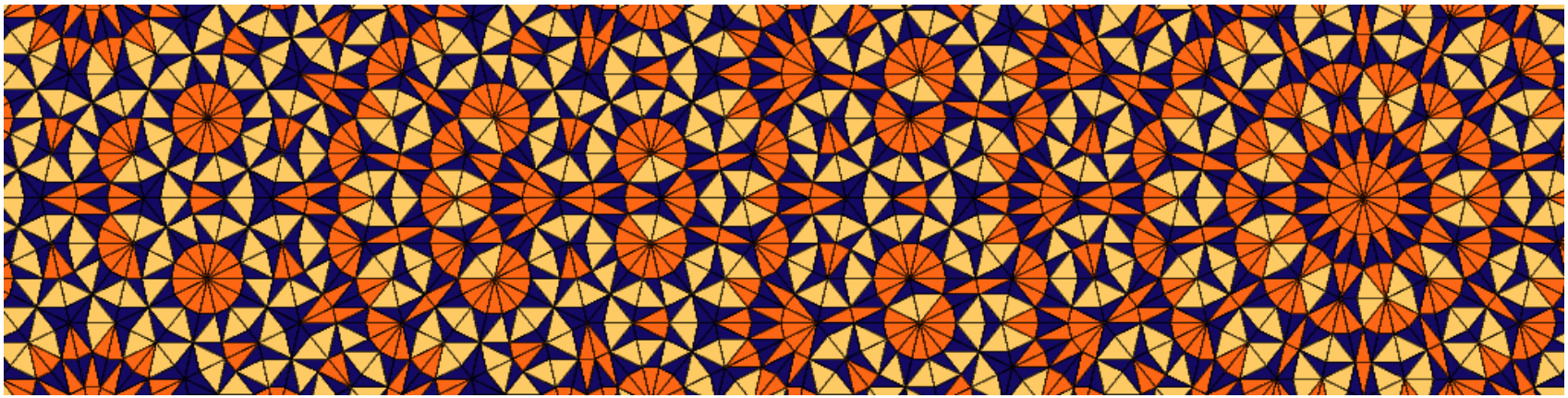
Panorama der Mathematik und Informatik

4: Literatur und Recherche I

Dirk Frettlöh
Technische Fakultät



Literatur, Publikationswesen, Recherche

- Wie misst man "Qualität" von Forschung?
- Wie wird Qualität von Forschung gesichert? Was geht schief?
- Wie kommt man an Fachartikel?
- Wie schreibt/liest man Fachartikel?

Woran wird ein Wissenschaftler gemessen? Primär:
(idealerweise, grob gesprochen)

- **Informatiker:** Programme, Algorithmen, Anwendungen
- **Mathematiker:** Sätze, Beweise

Am besten einschätzen können das Forscher, die auf dem selben Gebiet arbeiten.

Indirekt lässt sich das ablesen an der Publikationsliste. Die findet man oft auf der Homepage desjenigen. Oder

- Informatik: `http://dblp.uni-trier.de/db`
- Mathematik: `zbmath.org`, `www.ams.org/mathscinet`

Allererstes grobes Kriterium: Zahl der Publikationen.

home | browse | search | about

Please note: This is a beta version of the new dblp website.
You can find the classic dblp view of this page here.

Ipke Wachsmuth

-- custom --- | by year | Trier 1

'10 '00 '90 '80

[–] **2010 – today**

2013

- [c68] Hana Boukricha, Ipke Wachsmuth, Maria Nella Carminati, Pia Knoeferle: **A Computational Model of Empathy: Empirical Evaluation.** ACII 2013: 1-6
- [c67] Nikita Mattar, Ipke Wachsmuth: **Strangers and Friends - Adapting the Conversational Style of an Artificial Agent.** HCI (5) 2013: 102-111
- [c66] Felix Rabe, Ipke Wachsmuth: **Enhancing Human Computer Interaction with Episodic Memory in a Virtual Guide.** HCI (4) 2013: 117-125
- [c65] Julia Fröhlich, Ipke Wachsmuth: **The Visual, the Auditory and the Haptic - A User Study on Combining Modalities in Virtual Worlds.** HCI (18) 2013: 159-168
- [c64] Felix Rabe, Ipke Wachsmuth: **An Event Metric and an Episode Metric for a Virtual Guide.** ICAART (2) 2013: 543-546
- [c63] Benjamin Inden, Zofia Malisz, Petra Wagner, Ipke Wachsmuth: **Timing and entrainment of multimodal backchanneling behavior for an embodied conversational agent.** ICMI 2013: 181-188
- [c62] Hana Boukricha, Ipke Wachsmuth, Maria Nella Carminati, Pia Knoeferle: **Empathy and Its Modulation in a Virtual Human.** KI 2013: 25-36
- [c61] Nikita Mattar, Ipke Wachsmuth: **Adapting a Virtual Agent's Conversational Behavior by Social Strategies.** KI 2013: 288-291

2012

- [j22] Maha Salem, Stefan Kopp, Ipke Wachsmuth, Katharina J. Rohlfing, Frank Joublin: **Generation and Evaluation of Communicative Robot Gesture.** I. J. Social Robotics 4(2): 201-217 (2012)
- [j21] Ulli Waltinger, Alexa Breuing, Ipke Wachsmuth: **Connecting Question Answering and Conversational Agents - Contextualizing German Questions for Interactive Question Answering Systems.** KI 26(4): 381-390 (2012)
- [c60] Alexa Breuing, Ipke Wachsmuth: **Let's Talk Topically with Artificial Agents! - Providing Agents with Humanlike Topic Awareness in Everyday Dialog Situations.** ICAART (2) 2012: 62-71
- [c59] Nikita Mattar, Ipke Wachsmuth: **Who Are You? - On the Acquisition of Information about People for an Agent that Remembers.** ICAART (2) 2012: 98-105
- [c58] Felix Rabe, Ipke Wachsmuth: **Cognitively Motivated Episodic Memory for a Virtual Guide.** ICAART (1) 2012: 524-527
- [c57] Nikita Mattar, Ipke Wachsmuth: **Small Talk Is More than Chit-Chat - Exploiting Structures of Casual Conversations for a Virtual Agent.** KI 2012: 119-130
- [c56] Julia Fröhlich, Ipke Wachsmuth: **Acoustically enriched virtual worlds with minimum effort.** VR 2012: 147-148

2011

- [j20] John-Dylan Haynes, Michael Pauen, Ipke Wachsmuth: **Announcing Interdisciplinary College 2011 (IK 2011) - March 25 to April 1, 2010 at Günne, a charming village at Lake Möhne in central Germany.** Cognitive Processing 12(1): 135-136 (2011)
- [j19] Hana Boukricha, Ipke Wachsmuth: **Empathy-Based Emotional Alignment for a Virtual Human: A Three-Step Approach.** KI 25(3): 195-204

Edit Author Profile

Huck, Christian

MR Author ID:	**799517**
Earliest Indexed Publication:	2005
Total Publications:	**7**
Total Citations:	**15**

View Publications
Refine Search
Co-Authors
Collaboration Distance
Mathematics Genealogy Project
Citations

Co-authors (by number of collaborations)

Baake, Michael Gritzmann, Peter
Langfeld, Barbara Lord, Katja
Pleasants, Peter A. B. Spieß, Michael

Publications (by number in area)

Convex and discrete geometry
Geometry Statistical mechanics, structure of matter

Publications (by number of citations)

Convex and discrete geometry
Geometry Statistical mechanics, structure of matter

Matches: 7

Batch Download: Reviews (HTML) Retrieve Marked | Retrieve First 50 | Unmark All

Publications results for "Items authored by Huck, Christian"

MR3070541 Reviewed Pleasants, Peter A. B.; Huck, Christian Entropy and diffraction of the k-free points in n-dimensional lattices. *Discrete Comput. Geom.* 50 (2013), no. 1, 39–68. (Reviewer: Robby G. McKilliam) 52C07 (94A17)
PDF | Clipboard | Journal | Article

MR3039777 Reviewed Huck, Christian; Spieß, Michael Solution of a uniqueness problem in the discrete tomography of algebraic Delone sets. *J. Reine Angew. Math.* 677 (2013), 199–224. (Reviewer: Paolo Dulio) 52C07 (52B12)
PDF | Clipboard | Journal | Article

MR2556466 Reviewed Huck, Christian Uniqueness in discrete tomography of Delone sets with long-range order. *Discrete Comput. Geom.* 42 (2009), no. 4, 740–758. (Reviewer: Winfried Hochstättler) 52C23
PDF | Clipboard | Journal | Article

MR2548898 Reviewed Huck, Christian On the existence of U-polygons of class $c \geq 4$ in planar point sets. *Discrete Math.* 309 (2009), no. 16, 4977–4981. (Reviewer: Winfried Hochstättler) 52C23 (82D25)
PDF | Clipboard | Journal | Article

MR2489270 Reviewed Huck, Christian A note on affinely regular polygons. *European J. Combin.* 30 (2009), no. 2, 387–395. 51M20
PDF | Clipboard | Journal | Article

MR2263889 Reviewed Baake, Michael; Gritzmann, Peter; Huck, Christian; Langfeld, Barbara; Lord, Katja Discrete tomography of planar model sets. *Acta Crystallogr. Sect. A* 62 (2006), no. 6, 419–433. 82D25 (43A70 68Q25)
PDF | Clipboard | Journal | Article

MR2301095 Indexed Huck, Christian; Baake, Michael; Langfeld, Barbara; Gritzmann, Peter; Lord, Katja Discrete tomography of mathematical quasicrystals: a primer. *Proceedings of the Workshop on Discrete Tomography and its Applications,* 179–191 (electronic), Electron. Notes Discrete Math., 20, *Elsevier, Amsterdam,* 2005. 82D25 (05C60 68U10)
PDF | Clipboard | Series | Chapter

Matches: 7

Edit Author Profile

Baake, Michael

MR Author ID:	**28735**
Earliest Indexed Publication:	1982
Total Publications:	**116**
Total Author/Related Publications:	**120**
Total Citations:	**547**
Published as:	**Baake, M.**

View Publications
View Author/Related Publications
Refine Search
Co-Authors
Collaboration Distance
Mathematics Genealogy Project
Citations

Top 50 Co-authors (by number of collaborations)

Alcaraz, Francisco Castilho Allouche, Jean-Paul Baake, Ellen Baxter, Rodney J. Ben-Abraham, Shelomo I. Bovier, Anton Cassaigne, Julien Chaselon, Peter Christe, Philippe Eich-Soellner, Edda Elser, Veit Frettlöh, Dirk Gähler, Franz Gemünden, B. Grimm, Uwe Gritzmann, Peter Hermisson, Joachim Heuer, Manuela Höffe, Moritz Huck, Christian Jarvis, Peter D. Joseph, Dieter Klein, Markus[1] Klitzing, Richard Kramer, Peter Langfeld, Barbara Lenz, Daniel H. Lord, Katja Löwe, Matthias Moody, Robert V. Neumärker, Natascha Oedingen, R. Papadopolos, Zorka Pisani, Carmelo Pleasants, Peter A. B. Redner, Oliver Rehmann, Ulf Reinicke, P. Richard, Christoph Rittenberg, Vladimir Roberts, John A. G. Roth, Johannes Schlottmann, Martin Sing, Bernd von Gehlen, Günter Wagner, Holger Ward, Thomas B. Warrington, D. H. Zeidler, Dieter Zeiner, Peter

See All

Publications (by number in area)

Publications (by number of citations)

Matches: 116 Show first 100 results Select Page: Previous **1** 2 3 4 5 6 Next

Batch Download: Reviews (HTML) Retrieve Marked | Retrieve First 50 | Unmark All

Publications results for "Items authored by Baake, Michael "

MR3136260 Pending Baake, Michael; Grimm, Uwe Aperiodic order. Vol. 1. A mathematical invitation. With a foreword by Roger Penrose. Encyclopedia of Mathematics and its Applications, 149. *Cambridge University Press, Cambridge,* 2013. xvi+531 pp. ISBN: 978-0-521-86991-1 52-02 (11H06 20Cxx 20H15 82D25)
PDF | Clipboard | Series | Book

MR3032397 Reviewed Baake, Michael; Gähler, Franz; Grimm, Uwe Examples of substitution systems and their factors. *J. Integer Seq.* 16 (2013), no. 2, Article 13.2.14, 18 pp. (Reviewer: Karsten Keller) 37B10 (52C22)
PDF | Clipboard | Journal | Article

MR2975123 Reviewed Baake, Michael; Neumärker, Natascha; Roberts, John A. G. Orbit structure and (reversing) symmetries of toral endomorphisms on rational lattices. *Discrete Contin. Dyn. Syst.* 33 (2013), no. 2, 527–553. 37E30 (37E15)
PDF | Clipboard | Journal | Article

MR3028034 Reviewed Baake, Michael; Gähler, Franz; Grimm, Uwe Hexagonal inflation tilings and planar monotiles. *Symmetry* 4 (2012), no. 4, 581–602. (Reviewer: Juan García Escudero) 52C23 (37B50 52C20)
PDF | Clipboard | Journal | Article

MR3028033 Reviewed Baake, Michael; Grimm, Uwe On the notions of symmetry and aperiodicity for Delone sets. *Symmetry* 4 (2012), no. 4, 566–580. 52C23
PDF | Clipboard | Journal | Article

MR2798222 Reviewed Baake, Michael; Gähler, Franz; Grimm, Uwe Spectral and topological properties of a family of generalised Thue-Morse sequences. *J. Math. Phys.* 53 (2012), no. 3, 032701, 24 pp. (Reviewer: Thomas Ward) 37A30 (60K40)
PDF | Clipboard | Journal | Article

MR2962976 Reviewed Baake, Michael; Schlägel, Ulrike The Peano-Baker series. *Tr. Mat. Inst. Steklova* **275** (2011), Klassicheskaya i Sovremennaya Matematika v Pole Deyatelnosti Borisa Nikolaevicha Delone, 167--171; *translation in Proc. Steklov Inst. Math.* **275** (2011), no. 1, 155–159 ISBN: 5-7846-0120-2; 978-5-7846-0120-9 (Reviewer: Mickaël Matusinski) 34A25
PDF | Clipboard | Journal | Article

MR2894436 Reviewed Baake, Michael; Scharlau, Rudolf; Zeiner, Peter Similar sublattices of planar lattices. *Canad. J. Math.* 63 (2011), no. 6, 1220–1237. (Reviewer: Martin Henk) 11H06 (11R11 52C05)
PDF | Clipboard | Journal | Article

MR2787975 Reviewed Baake, Michael; van Enter, Aernout Close-packed dimers on the line: diffraction versus dynamical spectrum. *J. Stat. Phys.* 143 (2011), no. 1, 88–101. (Reviewer: Thomas Ward) 37A25 (37A35 37A60)
PDF | Clipboard | Journal | Article

MR2651440 Reviewed Baake, Michael; Ward, Tom Planar dynamical systems with pure Lebesgue diffraction spectrum. *J. Stat. Phys.* 140 (2010), no. 1, 90–102. 37A25 (37A35)
PDF | Clipboard | Journal | Article

MR2670229 Reviewed Baake, Michael; Lau, Eike; Paskunas, Vytautas A note on the dynamical zeta function of general toral endomorphisms. *Monatsh. Math.* 161 (2010), no. 1, 33–42. (Reviewer: Héctor Sánchez-Morgado) 37C30 (37C25 37D20)
PDF | Clipboard | Journal | Article

MR2606523 Reviewed von Wangenheim, Ute; Baake, Ellen; Baake, Michael Single-crossover recombination in discrete time. *J.*

Entstehen einer Publikation:

Publikationen zählen ist natürlich ein sehr ungenaues Maß für "Qualität". Später mehr. Zunächst vorbereitend:

- Idee (Studie, Experiment, Diskussion...)
- Aufschreiben (LaTeX, Word?)
- Zu einer Fachzeitschrift schicken (email, online)
- Die Editoren (Profs)
  - lehnen es ab (falsches Thema, zu schwach, crackpot) oder
  - geben es an Gutachter weiter (1-3 Experten, bleiben anonym)
- Auf Grund der Gutachten entscheiden Editoren: veröffentlichen oder ablehnen
- Artikel wird publiziert

Dies heißt "peer review-Verfahren". Bewährtes System um die Qualität zu sichern.

Verlage

Universitätsverlage, oder von Institutionen wie IEEE (Institute of Electrical and Electronics Engineers) oder AMS (American Mathematical Society), oder kommerzielle Verlage:

Vier große Unternehmen (mehr als 50% Marktanteil) :

- Elsevier (www.elsevier.com oder www.sciencedirect.com)
- Springer (www.springerlink.com)
- Wiley (onlinelibrary.wiley.com)
- Informa (weniger Mathe und Informatik)

...und etliche kleine: de Gruyter, Teubner...

ELSEVIER

Springer

WILEY
Publishers Since 1807

Fachzeitschriften

Mittlerweile viel auch online. Einige: *nur* online.

- Typische Druckauflage: 1000 Exemplare (Journal für die reine und angewandte Mathematik, kurz "Crelle")
- Halb-, vierteljährlich, alle zwei Monate oder monatlich
- Typische Preise: 0 - 7000 Euro/Jahr (Crelle: 3750)
  0-2 Euro pro Seite

Die Käufer sind fast ausschließlich Bibliotheken.

Leser der Druckausgaben: heutzutage praktisch niemand.

Zugriff auf die Artikel:

- Webseiten der Zeitschriften (kostenpflichtig, aus dem Uninetz gratis, falls Uni BI das Abo bezieht)
- Homepage des Autors
- `arXiv.org` (Mathe, Informatik, Physik)
- Andere freie preprintserver (`biorXiv`,...)

arXiv.org

"Preprintserver" (um das copyright zu umgehen, das Autoren normalerweise an die Zeitschriftenverlage abtreten)

Fächer: Physik, Mathe, Informatik, math. Biologie, Statistik. Für Mathe (und Physik) finden sich fast alle aktuellen Publikationen.

Gegründet 1991 als Ersatz für Preprints (Vorabdrucke) von Physikartikeln, als Emailverteiler, dann als ftp-Server `xxx.lanl.gov`. Damals gab's noch kein www!

Ab 1999 als `arXiv.org` an der Cornell University. 6 mirror sites weltweit (eine war (ist?) in Bielefeld!)

Seit Dez 2014: mehr als 1 Mio Artikel. Aktuell 1 029 699 Preprints. Pro Monat ca. 8000 neue.
(Andreas Loos: "Die Million ist geknackt", Mitteilungen DMV 1/2015)

[arXiv.org zeigen, siehe Video]

Wie wird im `arXiv` publiziert?

- Jeder Autor muss sich registrieren.
- Formate: bevorzugt TEX, LATEX, sonst PDF, PS, HTML.
- Seit 2004: Von einem neuen Autor kann verlangt werden dass er einen "endorser" (Unterstützer) findet.

Die letzte Regel u.a. wegen crackpots (vgl. Aufgabe 8, Blatt 3)

Crackpots

`wikipedia:` *"Crackpot ist ein abschätzig gemeinter englischer Slangausdruck für eine Person mit exzentrischen Ansichten ('Exzentriker', 'Spinner', 'Verrückter'[1]). In seiner eingeschränkten Bedeutung als 'eine Person, die Theorien vertritt, die dem gegenwärtigen Stand der Forschung widersprechen', ist der Begriff auch in die deutschsprachige Netzkultur eingedrungen."*

John Baez Crackpot index:
`math.ucr.edu/home/baez/crackpot.html`

The Crackpot Index, John Baez

A simple method for rating potentially revolutionary contributions to physics:

A -5 point starting credit.
1 point for every statement that is widely agreed on to be false.
2 points for every statement that is clearly vacuous.
3 points for every statement that is logically inconsistent.
5 points for each such statement that is adhered to despite careful correction.
5 points for using a thought experiment that contradicts the results of a widely accepted real experiment.
5 points for each word in all capital letters (except for those with defective keyboards).
5 points for each mention of "Einstien", "Hawkins" or "Feynmann".
10 points for each claim that quantum mechanics is fundamentally misguided (without good evidence).
10 points for pointing out that you have gone to school, as if this were evidence of sanity.
10 points for beginning the description of your theory by saying how long you have been working on it. (10 more for emphasizing that you worked on your own.)

10 points for mailing your theory to someone you don't know personally and asking them not to tell anyone else about it, for fear that your ideas will be stolen.
10 points for offering prize money to anyone who proves and/or finds any flaws in your theory.
10 points for each new term you invent and use without properly defining it.
10 points for each statement along the lines of "I'm not good at math, but my theory is conceptually right, so all I need is for someone to express it in terms of equations".
[...]
20 points for naming something after yourself.
[...]
40 points for comparing those who argue against your ideas to Nazis, stormtroopers, or brownshirts.
40 points for claiming that the "scientific establishment" is engaged in a "conspiracy" to prevent your work from gaining its well-deserved fame, or suchlike.
40 points for comparing yourself to Galileo, suggesting that a modern-day Inquisition is hard at work on your case, and so on.
[..]
50 points for claiming you have a revolutionary theory but giving no concrete testable predictions.

Typische Crackpot-Produkte:

- $\pi = 3$
- Beweis, der keiner ist. Meist einer berühmten Vermutung, z.B. Satz von Fermat, oder Riemannsche Vermutung, oder $3n + 1$-Vermutung
- Behauptung, anerkannte Grundlagen der Physik oder Mathematik seien falsch.

Zum letzten Punkt:

Z.B. `www.mathe-neu.de` u.v.m.

Die $3n+1$-Vermutung (auch Collatz-Vermutung oder Ulam-Vermutung oder Syrakus-Problem oder ...)

- Startwert $n \in \mathbb{N}$
- Falls n gerade: $n := n/2$. Sonst: $n := 3n+1$

Vermutung: für jedes $n \in \mathbb{N}$ landet das Verfahren irgendwann bei dem Zyklus $1 \to 4 \to 2 \to 1 \to 4 \to 2 \to 1 \cdots$

Beispiel: $11 \to 34 \to 17 \to 52 \to 26 \to 13 \to 40 \to 20 \to 10 \to 5 \to 16 \to 8 \to 4 \to 2 \to 1 \cdots$

Mit Computer: wahr für $n \leq 2^{60}$

Allgemein bis heute unbewiesen.

Siehe auch: *Simon Singh: Fermats letzter Satz*

Forschungsqualität messen

Recall: heute können wir die meisten Fachartikel im Internet bekommen.

Also: wozu noch klassische Zeitschriften? (Obwohl sie niemand mehr liest, obwohl sie sehr teuer sein können, obwohl s.o....)

- **Qualitätssicherung** durch peer review. Auf dem arXiv kann fast jeder publizieren. Für Artikel in einer Fachzeitschrift gelten strenge Maßstäbe. (Je nach Fach mehr oder weniger)
- **Qualitätsmaßstab**: Reputation der Zeitschrift erlaubt in etwa eine Einschätzung der wissenschaftlichen Leistung.

Wieviel ist eine Publikation "wert"? Je nachdem...

Unersetzlich: Expertengutachten.

Ansonsten:

- Wie oft wird die Arbeit zitiert?
- **Informatik:** ist es eine "gute" Konferenz?
- **Mathe:** ist es eine "gute" Zeitschrift?
  (Faustregel: Artikel in "Annals of Mathematics" $\Rightarrow$ Professur)

Ranglisten sind immer fehleranfällig. Verschiedene Ranglisten widersprechen sich.

Drei Versuche, die "Qualität" messbar zu machen:

- Impact factor (ISI, für Zeitschriften)
- Hirsch index (für Autoren)
- ERA Journal Rating (für Zeitschriften)

ISI impact factor berechnet sich aus der Zahl der Zitate in den letzten zwei Jahren (hm, etwas kurz?)

Bsp: Der impact factor für 2013 einer Zeitschrift ist 3.
D.h. jeder Artikel, der in dieser Zeitschrift 2011 und 2012 erschien, wurde 2013 durchschnittlich 3 mal zitiert.

Informatikzeitschriften mit dem höchsten impact factor (2008)

Rang	Name	IF	
1	MIS Quarterly	5.826	(Univerlag)
2	ACM Computing Surveys	5.250	(wiss. Ges.)
3	Bioinformatics	5.039	(Univerlag)
4	VLDB J	3.818	(wiss. Ges.)
5	Cognitive Brain Research	3.769	(Elsevier)
6	Neuroinformatics	3.750	(Springer)
7	IEEE Trans. Pattern Analysis	3.579	(wiss.-techn. Ges.)
8	Medical Image Analysis	3.505	(Elsevier)
9	ACM Transactions on Graphics	3.413	(wiss. Ges.)
10	Journal of Web Semantics	3.410	(Elsevier)

Informatikzeitschriften mit dem höchsten impact factor (2012)

1	Enterprise Information Systems UK	9.256
2	IEEE Trans. Fuzzy Systems	5.484
3	Int. J. Neural Systems	5.054
4	J. Statistical Software	4.910
5	IEEE Commun. Surveys & Tutorials	4.818
6	IEEE Trans. Evolutionary Computation	4.810
7	IEEE Trans. Pattern Analysis	4.795
8	MIS Quarterly	4.659
9	IEEE Computational Intelligence Magazine	4.629
10	Computer-Aided Civil and Infrastructure Eng.	4.460

Zum Vergleich: Die Top 10 *aller* Fachzeitschriften (2003)

	IF	
1	52.28	Annual Review of Immunology
2	37.65	Annual Review of Biochemistry
3	36.83	Physiological Reviews
4	35.04	Nature Reviews Molecular Cell Biology
5	34.83	The New England Journal of Medicine
6	33.95	Nature Reviews Cancer
7	33.06	CA – A Cancer Journal for Clinicians
8	30.98	Nature
9	30.55	Nature Medicine
10	30.17	Annual Review of Neuroscience

Hauptsächlich Medizin. Zum Vergleich:

Mathematics Journals Ranking

	Journal Title	Impact Factor	Half-Life
1	BULLETIN OF THE AMERICAN MATHEMATICAL SOCIETY	1.878	10
2	COMPUTATIONAL GEOMETRY-THEORY AND APPLICATIONS	1.818	10
3	ANNALS OF MATHEMATICS	1.708	10
4	ACTA MATHEMATICA	1.303	10
5	COMMUNICATIONS ON PURE AND APPLIED MATHEMATICS	1.19	10
6	ADVANCES IN MATHEMATICS	1.125	10
7	MEMOIRS OF THE AMERICAN MATHEMATICAL SOCIETY	0.982	10
8	INVENTIONES MATHEMATICAE	0.879	10
9	TOPOLOGY	0.864	10
10	JOURNAL OF DIFFERENTIAL GEOMETRY	0.849	9.9
11	PROCEEDINGS OF THE LONDON MATHEMATICAL SOCIETY	0.755	10
12	JOURNAL OF FUNCTIONAL ANALYSIS	0.837	8.7
13	MATHEMATISCHE ANNALEN	0.672	10
14	DUKE MATHEMATICAL JOURNAL	0.644	10
15	JOURNAL DE MATHEMATIQUES PURES ET APPLIQUEES	0.641	10
16	ANNALES SCIENTIFIQUES DE L ECOLE NORMALE SUPERIEURE	0.636	10
17	JOURNAL FUR DIE REINE UND ANGEWANDTE MATHEMATIK	0.597	10
18	COMMENTARII MATHEMATICI HELVETICI	0.576	10
19	JOURNAL OF DIFFERENTIAL EQUATIONS	0.614	9.1
20	TRANSACTIONS OF THE AMERICAN MATHEMATICAL SOCIETY	0.554	10
21	COMPOSITIO MATHEMATICA	0.523	10
22	AMERICAN JOURNAL OF MATHEMATICS	0.521	10
23	ISRAEL JOURNAL OF MATHEMATICS	0.507	10
24	JOURNAL D ANALYSE MATHEMATIQUE	0.491	10
25	MATHEMATICAL PROCEEDINGS OF THE CAMBRIDGE PHILOSOPHICAL SOCIETY	0.488	9.9
26	COMBINATORICA	0.476	10
27	ASTERISQUE	0.468	10
28	JOURNAL OF COMBINATORIAL THEORY SERIES A	0.471	9.9

discre Highlight All Match Case

Journals Ranked by Impact: Mathematics

Rank	2006 Impact Factor	Impact 2002-06	Impact 1981-2006
1	J. Amer. Math. Soc. (2.55)	J. Amer. Math. Soc. (5.08)	Annals of Mathematics (24.82)
2	Annals of Mathematics (2.43)	Acta Mathematica (4.79)	Comm. Pure Appl. Math. (24.12)
3	Bull. Amer. Math. Soc. (2.39)	Bull. Amer. Math. Soc. (4.46)	Acta Mathematica (22.93)
4	Comm. Pure Appl. Math. (2.03)	Annals of Mathematics (4.28)	Inventiones Mathemat. (18.64)
5	Inventiones Mathemat. (1.66)	Fdns. Computat. Math. (3.93)	J. Different. Geometry (17.31)
6	J. Eur. Math. Soc. (1.49)	Comm. Pure Appl. Math. (3.74)	Bull. Amer. Math. Soc. (16.31)
7	Duke Mathematical J. (1.41)	Inventiones Mathemat. (3.50)	Ann. Sci. Ecole Norm. (12.99)
8	Publ. Mathematiques (1.35)	Ann. Sci. Ecole Norm. (2.59)	J. Amer. Math. Soc. (12.40)
9	Acta Mathematica (1.33)	Duke Mathematical J. (2.57)	SIAM J. Algebr. Discr. (12.35)
10	Geometry & Topology (1.27)	J. Different. Geometry (2.53)	Duke Mathematical J. (10.01)

Probleme des impact factors:

- Bewertet Zeitschrift, nicht Autor
- Nicht fächerneutral! Bio $>$ Physik $>$ Mathe
- Manipulierbar

Bsp: *Chaos, Solitons and Fractals* (Elsevier)
Impact factor 2007: 3,025. Preis: 4000 Euro / Jahr.

Der Chef-Editor, Mohamed El Naschie, hat insgesamt über 300 Artikel publiziert.

Math Scinet zeigt 99 Artikel:

Matches: 99 Show all results Select Page: Previous **1** 2 3 4 5 Next

Batch Download: Reviews (HTML) Retrieve Marked | Retrieve First 50 | Unmark All

Publications results for "Items authored by El Naschie, Mohamed "

MR3104268 Indexed El Naschie, M. S. The quantum gravity Immirzi parameter—a general physical and topological interpretation. *Gravit. Cosmol.* 19 (2013), no. 3, 151–155. 83C45 (81V17 83C47)
PDF | Clipboard | Journal | Article

MR2372046 Indexed El Naschie, M. S. On a major exceptional Lie symmetry groups hierarchy and quantum gravity. *Chaos Solitons Fractals* 36 (2008), no. 1, 42–44. 83C45
PDF | Clipboard | Journal | Article

MR2372043 Indexed El Naschie, M. S. High energy physics and the standard model from the exceptional Lie groups. *Chaos Solitons Fractals* 36 (2008), no. 1, 1–17. 81V22 (81R05)
PDF | Clipboard | Journal | Article

MR2238693 Indexed El Naschie, M. Saladin Intermediate prerequisites for E-infinity theory (further recommended reading in nonlinear dynamics and mathematical physics). *Chaos Solitons Fractals* 30 (2006), no. 3, 622–628. 81T99 (81-02)
PDF | Clipboard | Journal | Article

MR2238691 Indexed El Naschie, M. S. Elementary prerequisites for E-infinity (recommended background readings in nonlinear dynamics, geometry and topology). *Chaos Solitons Fractals* 30 (2006), no. 3, 579–605. 81V99 (81-02)
PDF | Clipboard | Journal | Article

MR2212775 Indexed El Naschie, M. S. Sir Hermann Bondi—1st November 1919–10th September 2005. *Chaos Solitons Fractals* 28 (2006), no. 4, 845. 01A70
PDF | Clipboard | Journal | Article

MR1882989 Indexed El Naschie, M. S. Wild topology, hyperbolic geometry and fusion algebra of high energy particle physics. *Chaos Solitons Fractals* 13 (2002), no. 9, 1935–1945. 81V99 (57M50)
PDF | Clipboard | Journal | Article

MR1874799 Indexed El Naschie, M. S. Quantum loops, wild topology and fat Cantor sets in transfinite high-energy physics. *Chaos Solitons Fractals* 13 (2002), no. 5, 1167–1174. 83C45 (81V17)
PDF | Clipboard | Journal | Article

MR1840529 Indexed El Naschie, M. S. Erratum to: "Coupled oscillations and mode locking of quantum gravity fields, scale relativity and $\mathcal{E}^{(\infty)}$ space" [Chaos Solitons Fractals **12** (2001), no. 1, 179–192; 1786917]. *Chaos Solitons Fractals* 12 (2001), no. 7, 1375. 83C45
PDF | Clipboard | Journal | Article

MR1840007 Indexed El Naschie, M. S. Remarks to moduli spaces, virtual dimensions and heterotic strings. *Chaos Solitons Fractals* 12 (2001), no. 9, 1607–1610. 81T30 (14J20)
PDF | Clipboard | Journal | Article

MR1833406 Reviewed El Naschie, M. S. Notes on superstrings and the infinite sums of Fibonacci and Lucas numbers. *Chaos Solitons Fractals* 12 (2001), no. 10, 1937–1940. (Reviewer: Kazusumi Ino) 11B39 (11Z05)

Ca. 70 von 99 Artikeln erscheinen in Chaos, Solitons and Fractals.

"Most scientists contacted by Nature comment that El Naschie's papers tend to be of poor quality. [..] 'it's plain obvious that there was either zero, or at best very poor, peer review, of his own papers' ".
(Nature)

"undisciplined numerology filled with impressive buzzwords"
(John Baez)

El Naschie bezeichnete sich fälschlicherweise auf seiner Webseite als "distinguished fellow" der Uni Frankfurt.

Rücktritt als Editor von C,S&F 2009. Klage gegen *Nature*, abgewiesen 2012.

Der Fall El-Naschie zeigt:

- Durch häufiges Selbstzitieren kann der impact factor künstlich erhöht werden (schlecht).
- Er flog auf, obwohl er nichts wirklich Unerlaubtes tat, sondern lediglich schlechte Wissenschaft betrieb (gut).

Anderer Versuch, statt nur Zitate zu zählen: **Hirsch-Index** oder **h-index**. (2005 vorgeschlagen)

"A scientist has index h if h of his/her N_p papers have at least h citations each, and the other $(N_p - h)$ papers have no more than h citations each."

Beispiel:

Author Citations for Dirk Frettlöh

Dirk Frettlöh is cited 33 times by 32 authors

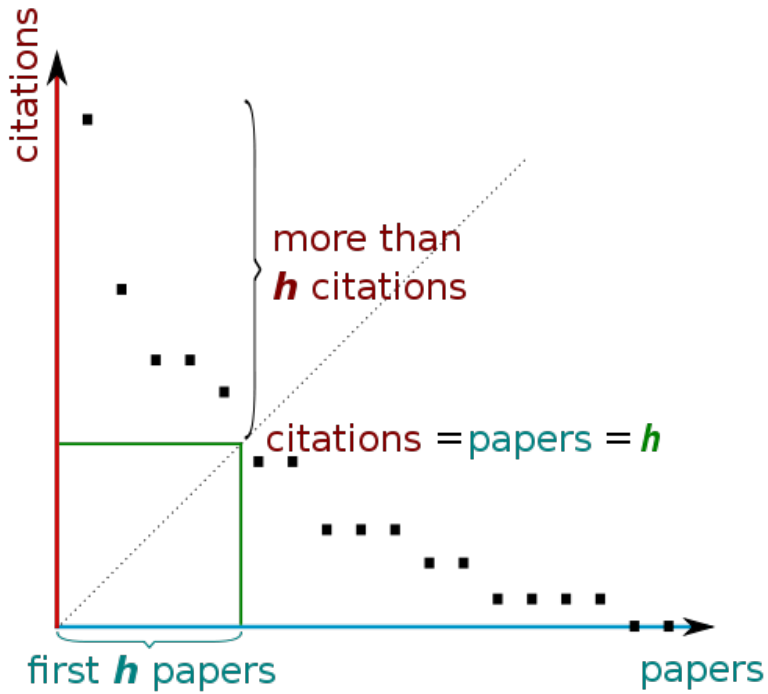
in the MR Citation Database

Most Cited Publications	
Citations	**Publication**
9	**MR2204140 (2007f:52044)** Frettlöh, D. Duality of model sets generated by substitutions. *Rev. Roumaine Math. Pures Appl.* 50 (2005), no. 5-6, 619–639. 52C23
7	**MR2301525 (2008k:52039)** Frettlöh, D.; Sing, B. Computing modular coincidences for substitution tilings and point sets. *Discrete Comput. Geom.* 37 (2007), no. 3, 381–407. 52C07 (37B50)
6	**MR2463164 (2010c:05028)** Frettlöh, Dirk Substitution tilings with statistical circular symmetry. *European J. Combin.* 29 (2008), no. 8, 1881–1893. (Reviewer: Benoit Loridant) 05B45 (52C23)
5	**MR2289650 (2008e:37013)** Baake, Michael; Frettlöh, Dirk; Grimm, Uwe A radial analogue of Poisson's summation formula with applications to powder diffraction and pinwheel patterns. *J. Geom. Phys.* 57 (2007), no. 5, 1331–1343. (Reviewer: Samuel Petite) 37B50 (82D25)
3	**MR2381350 (2008m:52044)** Frettlöh, D. Self-dual tilings with respect to star-duality. *Theoret. Comput. Sci.* 391 (2008), no. 1-2, 39–50. 52C23 (11B85 68R15)
2	**MR2125585 (2005k:82103)** Baake, M.; Frettlöh, D. SCD patterns have singular diffraction. *J. Math. Phys.* 46 (2005), no. 3, 033510, 10 pp. (Reviewer: David Damanik) 82D25 (52C23)
1	**MR2904970** Berthé, Valérie; Frettlöh, Dirk; Sirvent, Victor Selfdual substitutions in dimension one. *European J. Combin.* 33 (2012), no. 6, 981–1000. (Reviewer: Eric Rowland) 68R15 (05A05)

Understanding the MR Citation Database | Reference List Journals

- 1 Artikel wird mind. 1-mal zitiert.
- 2 Artikel werden mind. 2-mal zitiert.
- 3 Artikel werden mind. 3-mal zitiert.
- 4 Artikel werden mind. 4-mal zitiert.
- ~~5 Artikel werden 5-mal zitiert~~

Also h-index 4.



Mathematiker mit hohem h-index

Microsoft Academic Search (Beta) — Sign in

Advanced Search

- Authors »
- Publications »
- Conferences »
- Journals »
- Keywords »
- Organizations »

Academic > Mathematics

Top authors in mathematics

1–100 of 401,720 results

All Years

1 2 3 4 5 6

Authors	Publications	Field Rating
 **Pierre-Louis Lions** Paris Dauphine University Publications: 237 | Citations: 12378 **Fields of study:** Mathematical Analysis, Mechanical Engineering, Geometry	194	45
 **Bradley Efron** Stanford University Publications: 201 | Citations: 28959 **Fields of study:** Statistics, Diseases, Astrophysics & Space Science	124	44
 **Peter Hall** University of Melbourne Publications: 474 | Citations: 8144 **Fields of study:** Statistics, Probability, Geometry	381	43
 **Michael Atiyah** University of Edinburgh Publications: 195 | Citations: 11544 **Fields of study:** Geometry, Mathematical Analysis, Algebra	113	43
 **Gene H. Golub** Stanford University Publications: 379 | Citations: 30266 **Fields of study:** Mathematical Analysis, Scientific Computing, Algorithms & Theory	166	42
Louis Nirenberg		

	**Louis Nirenberg** New York University Publications: 108 | Citations: 7627 **Fields of study:** Mathematical Analysis, Geometry, Physics	91	41
	**David Donoho** Stanford University Publications: 351 | Citations: 27524 **Fields of study:** Algorithms & Theory, Statistics, Multimedia	88	40
	**Barry Simon** California Institute of Technology Publications: 515 | Citations: 20422 **Fields of study:** Mathematical Physics, Mathematical Analysis, Chemical Physics & Material Physics	221	39
	**Haim Brezis** Rutgers, The State University of New Jersey Publications: 173 | Citations: 5370 **Fields of study:** Mathematical Analysis, Mechanical Engineering, Geometry	134	39
	**R. Tyrrell Rockafellar** University of Washington Publications: 204 | Citations: 8676 **Fields of study:** Geometry, Control & Optimization, Mathematical Modelling	120	39
	**Noga Alon** Tel Aviv University Publications: 707 | Citations: 15106 **Fields of study:** Algorithms & Theory, Discrete Mathematics, Scientific Computing	341	37
	**Elias M. Stein** Princeton University Publications: 217 | Citations: 11851 **Fields of study:** Mathematical Analysis, Geometry, Mechanical Engineering	167	37
	**Persi Diaconis**		

	**Persi Diaconis** Stanford University Publications: 259 | Citations: 7486 **Fields of study:** Statistics, Probability, Algorithms & Theory	163	37
	**Paul D. Seymour** Princeton University Publications: 233 | Citations: 8980 **Fields of study:** Algorithms & Theory, Discrete Mathematics, Control & Optimization	162	37
	**George Lusztig** Massachusetts Institute of Technology Publications: 228 | Citations: 6287 **Fields of study:** Algebra, Mathematical Analysis, Geometry	148	37
	**Jianqing Fan (范剑青)** Princeton University Publications: 211 | Citations: 6091 **Fields of study:** Statistics, Probability, Algorithms & Theory	147	37
	**Paul Erdos (Paul Erdös)** Publications: 918 | Citations: 10113 **Fields of study:** Discrete Mathematics, Probability, Algorithms & Theory	746	36
	**G. E. P. Box** University of Wisconsin Madison Publications: 207 | Citations: 21786 **Fields of study:** Statistics, Reliability & Risk Analysis, Business Administration & Economics	104	36
	**Robert J. Tibshirani** Stanford University Publications: 396 | Citations: 58670 **Fields of study:** Statistics, Oncology, Genetics & Genealogy	88	36

	**Saharon Shelah** Hebrew University of Jerusalem Publications: 1129 | Citations: 5672 **Fields of study:** Scientific Computing, Algorithms & Theory, Algebra	848	24
	**Donal O'regan** National University of Ireland Galway Publications: 689 | Citations: 3337 **Fields of study:** Mathematical Analysis, Scientific Computing, Number Theory	520	24
	**Svante Janson** Uppsala University Publications: 328 | Citations: 2787 **Fields of study:** Probability, Algorithms & Theory, Discrete Mathematics	230	24
141 	**Michael Rockner (Michael Röckner)** University of Bielefeld Publications: 250 | Citations: 2131 **Fields of study:** Mathematical Analysis, Geometry, Probability	206	24
	**Douglas Stinson** University of Waterloo Publications: 317 | Citations: 5917 **Fields of study:** Security & Privacy, Algorithms & Theory, Discrete Mathematics	147	24
	**Kenneth Hvistendahl Karlsen** University of Oslo Publications: 225 | Citations: 2348 **Fields of study:** Mathematical Analysis, Control & Optimization, Scientific Computing	143	24
	**Fan R. K. Chung (金芳蓉)** University of California San Diego Publications: 312 | Citations: 7475 **Fields of study:** Algorithms & Theory, Discrete	130	24

academic.research.microsoft.com/Author/999062/michael-rockner

	Physics, Mathematical Physics, Statistical Physics		
	**WILLIAM DWYER** University of Notre Dame Publications: 136 | Citations: 1913 **Fields of study:** Geometry, Algebra, Mathematical Analysis	115	23
	**Max Gunzburger** Florida State University Publications: 307 | Citations: 3348 **Fields of study:** Mathematical Analysis, Scientific Computing, Mechanical Engineering	110	23
188 	**Claus Michael Ringel** University of Bielefeld Publications: 145 | Citations: 2598 **Fields of study:** Algebra, Number Theory, Mathematical Analysis	108	23
	**HONG-KUN XU (徐洪坤)** National Sun Yat-Sen University, Taiwan Publications: 120 | Citations: 2812 **Fields of study:** Algorithms & Theory, Aeronautics & Aerospace Engineering, Chemical Engineering	107	23
	**Barry Mazur** Harvard University Publications: 132 | Citations: 2544 **Fields of study:** Mathematical Analysis, Astrophysics & Space Science, Scientific Computing	92	23
	**Benoit Perthame (Benoît Perthame)** UMR7598 Laboratoire Jacques-Louis Lions Publications: 150 | Citations: 2073 **Fields of study:** Mathematical Analysis, Mechanical Engineering, Mathematical Physics	91	23
	**Gilbert Strang** Massachusetts Institute of Technology Publications: 170 | Citations: 10257 **Fields of study:** Mathematical Analysis, Mechanical Engineering, Natural Language & Speech	87	23

Bioinformatiker mit hohem h-index

Microsoft Academic Search (Beta)

Sign in

Advanced Search

- Authors »
- Publications »
- Conferences »
- Journals »
- Keywords »
- Organizations »

Academic > Computer Science > Bioinformatics & Computational Biology

Top authors in bioinformatics & computational biology

1–100 of 93,782 results

All Years

1 2 3 4 5 6

	Authors	Publications	Field Rating
1	 **William Stafford Noble** University of Washington Publications: 224 | Citations: 8154 **Fields of study:** Bioinformatics & Computational Biology, Molecular Biology, Biochemistry	90	30
	 **Pavel Pevzner** University of California San Diego Publications: 232 | Citations: 10013 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Genetics & Genealogy	89	28
	 **Ron Shamir** Tel Aviv University Publications: 289 | Citations: 6619 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Genetics & Genealogy	87	28
	 **Satoru Miyano (宮野悟)** University of Tokyo Publications: 353 | Citations: 4547 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Data Mining	116	26
	 **Roded Sharan** Tel Aviv University Publications: 173 | Citations: 4535 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Molecular Biology	75	26
	David Haussler		

Engineering, Bioinformatics & Computational Biology, Energy

	**Andy Brass** University of Manchester Publications: 101 | Citations: 2707 **Fields of study:** Bioinformatics & Computational Biology, Genetics & Genealogy, Biochemistry	25	17
	**George M. Church** Harvard University Publications: 261 | Citations: 18151 **Fields of study:** Genetics & Genealogy, Molecular Biology, Biochemistry	22	17
	**Philip E Bourne** University of California San Diego Publications: 306 | Citations: 10904 **Fields of study:** Bioinformatics & Computational Biology, Biochemistry, Molecular Biology	128	16
	**Jens Stoye** University of Bielefeld Publications: 131 | Citations: 1923 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Molecular Biology	65	16
	**Olivier Bodenreider** National Institutes of Health, United States Publications: 178 | Citations: 1850 **Fields of study:** Bioinformatics & Computational Biology, Artificial Intelligence, World Wide Web	60	16
	**Eugene W. Myers** University of California Berkeley Publications: 301 | Citations: 36395 **Fields of study:** Bioinformatics & Computational Biology, Algorithms & Theory, Oncology	55	16
	**Robert Giegerich** University of Bielefeld Publications: 139 | Citations: 2436 **Fields of study:** Bioinformatics & Computational Biology, Programming Languages, Software Engineering	49	16

Dritte Möglichkeit:

ERA journal ranking: (Excellence in Research for Australia) 2010 vom Australian Research Council veröffentlicht (das australische Äquivalent der DFG (Deutsche Forschungsgemeinschaft), verteilt Staatsgelder an Forscher).

Versuch, Qualität fachunabhängig zu messen. Verschiedene Faktoren: impact factor, aber auch Empfehlungen der Forscher.

Unterscheidet nur nach

- A*: Top 5%
- A: nächste 15%
- B: nächste 30%
- C: restliche 50%

446 C	Alkalmazott Matematikai Lapok
878 C	American Journal of Mathematical and Management Sciences
27 A*	American Journal of Mathematics
944 B	American Journal of Physics
28 B	American Mathematical Monthly
342 B	American Mathematical Society. Notices
770 B	American Statistician
30753 B	An international journal of Dynamical Systems
32208 C	Analysis and Applications
454 C	Analysis in Theory and Applications
30658 B	Analysis Mathematica
39988 B	Analysis: international mathematical journal of analysis and its applications
945 B	Annalen der Physik
39987 B	Annales Academiae Scientiarum Fennicae. Mathematica
32522 A*	Annales de l'Institut Henri Poincar&#65533; (C) Analyse Non Lin&#65533;aire
946 B	Annales Henri Poincare
35 C	Annales Polonici Mathematici
455 A*	Annales Scientifiques de l'Ecole Normale Superieure
456 C	Annales Universitatis Mariae Curie-Sklodowska. Sectio A. Mathematica
44599 C	Annali dell'Universita di Ferrara
457 A	Annali di Matematica Pura ed Applicata
35604 A	Annals of Actuarial Science
774 A*	Annals of Applied Probability
880 A*	Annals of Applied Statistics
38 A	Annals of Combinatorics
39 B	Annals of Global Analysis and Geometry
40 A*	Annals of Mathematics
44617 C	Annals of Mathematics Studies
41 B	Annals of Operations Research
947 A	Annals of Physics

Das ERA journal ranking wurde 2012 wieder eingestellt.

Ein Problem: Institutsleiter drängen Forscher, in A- und A*-Zeitschriften zu publizieren.

Zusammenfassung:
Versuche, die Qualität von Publikationen zu messen:

- Impact factor (ISI)
- Hirsch index (z.B. Microsoft academic search)
- ERA Math Journal Rating

Fazit:
Viele dieser Verfahren liefern relevante Informationen.
Kein Verfahren kann zu 100% zuverlässig sein.
Jedes dieser Verfahren kann missbraucht werden.

Dennoch ermöglicht die Kenntnis dieser Verfahren und ihrer jeweiligen Schwächen (!) eine erste Einordnung.

Das alles hat übrigens recht wenig mit den Uni-Rankings von Zeit oder Spiegel zu tun. Diese bewerten oft (auch) Studienbedingungen, nicht allein Forschung.

Probleme im Publikationsbetrieb heute:

- Mehr und mehr Publikationen (Mathe, Physik, Informatik, Bio, Chemie, Medizin)
- Kleinteiligeres Publizieren
- Mehr und mehr Autoren
- Mehr und mehr Gutachten nötig
- "Publish or perish" (Quantität statt Qualität wird bewertet)