PUBLICATIONS

Satyanad Kichenassamy
(Professeur des Universités)

Des liens vers le texte intégral de certaines publications sont également disponibles sous les « notices bibliographiques » correspondantes sur le site :

https://hal.archives-ouvertes.fr/aut/Satyanad-Kichenassamy

ou

https://cv.archives-ouvertes.fr/satyanad-kichenassamy

et sur la page de l'auteur : https://phare.normalesup.org/~kichenassamy/

Indicateurs bibliométriques (au 9 février 2026) : Google Scholar,

- 5054 citations
- Facteur h : 25

Zentralblatt für Mathematik : 230 comptes rendus au total au 7 août 2025, dont 19 recensions critiques d'ouvrages, disponibles sur https://zbmath.org/

Mathematical Reviews : 76 comptes rendus dont deux recensions critiques d'ouvrages, disponibles sur https://mathscinet.ams.org

Monographies (1-2) et contributions à des ouvrages collectifs (3-13)

1. ***Nonlinear Wave Equations***,
monographie, dans la collection "*Pure and Applied Mathematics: A Series of Monographs and Textbooks*," vol. 194, Marcel Dekker, New York (septembre 1995), xv + 276 pages (ISBN: 0-8247-9328-5).

2. ***Fuchsian Reduction : Applications to Geometry, Cosmology and Mathematical Physics,***
monographie, vol. 71 de la collection *Progress in Nonlinear Differential Equations and Their Applications*, Birkhäuser Verlag (septembre 2007) xi + 289 pages (ISBN: 978-0-8176-4352-2).

3. "Schauder-type estimates and applications",
Chapitre 5 du *Handbook of Differential Equations*, Section "*Stationary Partial Differential Equations*", M. Chipot and P. Quittner (eds.), Elsevier, 2006, vol. 3, pp. 401–464.

4. "Symmetric hyperbolic systems and shock waves",
in *Encyclopedia of Mathematical Physics*, J.-P. Françoise, G. L. Naber, Tsou S. T. (eds.), Oxford: Elsevier, 2006, vol. 5, pp. 160–166.

5. "Recent progress on boundary blow-up", in *: Elliptic and Parabolic Problems : A Special Tribute to the Work of Haïm Brezis*, C. Bandle *et al.* (éds.), Progress in Nonlinear Differential Equations and Their Applications, vol. 63, Birkhäuser Verlag, Basel (2005) pp. 329–341.

6. « L'emploi métonymique de l'arbre *kallāl* dans la philosophie médiévale tamoule », in : *L'Arbre en Asie*, P. S. Filliozat et M. Zink éd., Paris, AIBL (Académie des Inscriptions et Belles-Lettres), 2018, pp. 279–299.

7. « La légende de la colonne de lumière : une analyse indienne du problème de l'origine du monde », in : *Mythes d'origine dans les civilisations de l'Asie,* (éd. P.-S. Filliozat et M. Zink), AIBL (Acad. des Inscriptions et Belles-Lettres), Paris, (2021), pp. 145-167 (ISBN : 978-2-87754-672-0).

8. "An Indian critique of the notion of absolute beginning", *Images and Stories of the Origin(s) of the World and Humankind*, Julia A. B. Hegewald & Marion Gymnich (eds), Mohr Siebeck, Tübingen, 2024, pp. 84–109 (ISBN 978-3-16-162736-1). *E-book :* ISBN 978-3-16-162737-8
DOI 10.1628/978-3-16-162737-8

9. « La liberté de l'enfant d'après les sources sanskrites et tamoules, et l'humanisme scientifique indien » in *Enfance et jeunesse dans les civilisations de l'Asie*, (éd. J.-M. Mouton et N. Grimal), AIBL (Académie des Inscriptions et Belles-Lettres), Paris, June/juin 2024, pp. 238-254.

10. "Geometry without figures: Mathematics as apodictic discourse in Indian texts", in *Vedic Education and Ancient Indian Astronomy*, Dr. Parvathy K. P. & Satyabhama N. (eds.), Motilal Banarsidass, New Delhi, 2025, pp. 105–135. ISBN: 978-93-5676-392-0.

11. « Mesure, rythme et temps dans la musique classique de l'Inde du Sud », in *La perception du rythme selon les arts et les cultures*, Isabelle Davy et Patrick Otto (dir.), L'Harmattan, Paris, 2025, pp. 49-64. ISBN : 978-2-336-49327-5

12. « La femme inviolable : l'héroïsme de la fortitude en Inde », in *La fabrique du héros en Asie*, (éd. J.-M. Mouton et N. Grimal), AIBL (Académie des Inscriptions et Belles-Lettres), Paris, mars 2026, pp. 237-260 (ISBN : 978-2-87754-732-1). (Colloque des 15-16 mai 2025.)

13. "Mathematical epistemology in the Vedic ritual corpus," in *The Vedas in Perspective: Myths, Language and Ritual*, J.E.M. Houben, S. D'Intino, J. Rotaru (eds.), Brill-De Gruyter, Leiden, à paraître.

Communications dans des séminaires ou conférences internationales

C1. Energy estimates for surface-valued maps with prescribed singularities, in : *Nonlinear Variational Problems* (vol. 2), Pitman Research Notes in Mathematics, vol. 193, A. Marino et M. K. V. Murthy (éds.), (1989) pp. 92–98 (avec H. Brezis).

C2. Symmetrization on the sphere and applications,

in : *Nonlinear Partial Differential Equations and Applications,*
H. Brezis et J.-L. Lions (eds.), Longman Sci. Tech., Harlow (1991) pp. 272–283.

C3. Périmètre sur les variétés et applications aux équations aux dérivées partielles,
Actes Séminaire E. D. P. 1986–87, École Polytechnique, exp. n° 14.

C4. Breathers and the sine-Gordon equation,
in : *Proc. AMS-IMS-SIAM Joint Summer Conference "Inverse Scattering and Applications"*
D. H. Sattinger, C. Tracy, S. Venakides (eds.), *Contemporary Mathematics*, **122** (1991) 73–76.

C5. Gradient flows and geometric active contour models,
in : *Proceedings of the ICCV 1995 (International Conference on Computer Vision)* pp. 810–815
(avec A. Kumar, P. J. Olver, A. Tannenbaum et A.Yezzi).

C6. Active contours for visual tracking: a geometric gradient based approach,
in : *Proceedings of the 34th IEEE Conference on Decision and Control*, *vol. 4,* (1995) pp. 4041-4046
(avec A. Kumar, P. J. Olver, A. Tannenbaum et A.Yezzi).

C7. Nonlinear diffusion and hyperbolic smoothing for edge enhancement,
in : *Proc. ICAOS'96* (12th International Conf. On Analysis and Optimization of Systems: Images, Wavelets and PDE's), *Lect. Notes in Control and Info. Sci.*, **219**, Springer Verlag, Berlin, pp. 119–124 (1996).

C8. Stability of blow-up patterns for nonlinear wave equations,
in : *Proc. AMS-IMS-SIAM Joint Summer Research Conference "Nonlinear PDEs, Dynamics and Continuum Physics,"* J. Bona, K. Saxton, R. Saxton (éds.) *Contemporary Mathematics*, **255** (2000) 139–162.

C9. La compréhension inter-linguistique en Inde,
in : Actes du colloque international : « *L'avenir du patrimoine linguistique et culturel de l'Europe* » organisé par le CIRLEP, (Reims, 3 juillet 2003), E. Castagne et J.-E. Tyvaert (éds.) (2004) pp. 45–49.

C10. The mathematical analysis of the Perona-Malik equation and its practical impact,
Proc. Mathematics and Image Analysis 2006 (Paris, Sept. 18–21, 2006).

C11. Brahmagupta's triquadrilateral,
in : *Proc. ISHM-2012* (International Seminar on the History of Mathematics, Ramjas College, University of Delhi, Inde, 19-20 nov. 2012), pp. 33-35.

C12. Le « triquadrilatère » de Brahmagupta : Analyse d'un texte mathématique,
in : *Comptes Rendus du Séminaire d'Histoire des Mathématiques*, **1** (2015), pp. 47-66.
Institut de Recherche sur l'Enseignement des Mathématiques (IREM) de Reims, janvier 2015.
(ISBN 978-2-910076-13-9)
http://perso.numericable.fr/patrperrin/doc/crvo1ar3.pdf

C13. О решении уравнения Лиувилля (1850, 1853) и его влиянии (On the solution of Liouville's equation (1850, 1853) and its impact)

in Институт истории естествознания и техники им. С.И. Вавилова. Годичная научная конференция, 2021. М.: ИИЕТ РАН, 2021,
R.A. Fando [Р.А. Фандо], E.V. Minina [Е.В. Минина] and V.M. Savenkova [В.М. Савенкова], eds. (ISBN 978-5-6046393-4-4), pp. 81-86.
(avec E.M. Bogatov [Е.М. Богатов]).
http://ihst.ru/publications/iiet-annual-conference/
Link to English translation on HAL.

C14. The Cauchy-Bunyakovsky-Schwarz inequality and its mathematical interpretations, *Seminar on the History of Mathematics*, St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences (15 avril 2021). Lien vers la video

C15. Geometry without figures: Mathematics as apodictic discourse in Indian texts, *International Conference on Ancient Indian Astronomy and Mathematics, with Special reference to Kerala*, Sreekrishnapuram V.T. Bhattathiripad College, Mannampatta, Palakkad, Inde, July 26-28, 2021. Lien vers la vidéo sur YouTube. Voir n° 11 dans la catégorie « chapitres d'ouvrages ».

Articles dans des revues internationales avec comité de lecture.

N.B. A40, A49, A51 et A56 sont des recensions critiques d'ouvrages. Les recensions dans les Mathematical Reviews et dans le Zentralblatt für Mathematik sont regroupées dans la section suivante.

A1. Solutions positives des équations quasilinéaires elliptiques,
C. R. Acad. Sci. Paris, **300**, série 1 (1985) 589–591 (avec J. Smoller).

A2. Singularités isolées de l'équation $-div(|\nabla u|^{p-2}\nabla u)=0$,
C. R. Acad. Sci. Paris, **301**, série 1 (1985) 149–151 (avec L. Véron).

A3. Singular solutions of the *p*-Laplace equation,
Mathematische Annalen, **275** (1986) 599–615 (avec L. Véron).

A4. Quasilinear problems with singularities,
Manuscripta Math., **57** (1987) 281–313.

A5. Compactness theorems for differential forms,
Comm. Pure and Appl. Math., **42** (1989) 47–54.

A6. Local index of potential operators of monotone type,
Houston J. Math., **16** : 1 (1990) 139–149.

A7. On the existence of radial solutions of quasilinear elliptic equations,
Nonlinearity, **3** : 3 (August 1990) 677–694 (avec J. Smoller).

A8. Breather solutions of the nonlinear wave equation,
Comm. Pure and Appl. Math., **44** (1991) 789–818.

A9. Existence and non-existence of solitary wave solutions to higher order model evolution equations,
SIAM J. Math. Anal., **23** : 5 (Sept. 1992) 1141–1166 (avec P. J. Olver).

A10. Blow-up surfaces for nonlinear wave equations, Part I,
Comm. in P. D. E., **18** : 3 & 4 (1993) 431–452 (avec W. Littman).

A11. Blow-up surfaces for nonlinear wave equations, Part II,
Comm. in P. D. E., **18** : 11 (1993) 1869–1899 (avec W. Littman).

A12. The prolongation formula for tensor fields,
Journal of Physics A: Mathematical and General, **27** : 23 (Dec. 7, 1994) 7857–7874.

A13. The structure of WTC expansions and applications,
Journal of Physics A: Mathematical and General, **28** : 7 (April 7, 1995) 1977–2004
(avec G. K. Srinivasan).

A14. Applications of the division theorem in H^s,
Journal of Dynamics and Differential Equations, **8** : 3 (1996) 407–425.

A15. Fuchsian equations in Sobolev spaces and blow-up.
Journal of Differential Equations, **125** (1996) 299–327.

A16. The blow-up problem for exponential nonlinearities,
Communications in PDE, **21** : 1&2 (1996) 125–162.

A17. Conformal curvature flows: From phase transitions to active vision,
Archive for Rational Mechanics and Analysis, **134** (1996) 275–301
(avec A. Kumar, P. J. Olver, A. Tannenbaum et A.Yezzi).

A18. Existence of solitary waves for water-wave models,
Nonlinearity, **10** : 1 (January 1997) 133–151.

A19. A geometric snake model for segmentation of medical imagery,
IEEE Transactions on Medical Imaging, **16** : 2 (April 1997) 199–209
(avec A. Kumar, P. J. Olver, A. Tannenbaum et A.Yezzi).

A20. The Perona-Malik paradox,
SIAM Journal of Applied Mathematics, **57** : 5 (Oct. 1997) 1328–1342.

A21. Instability of pole singularities for the Chazy equation,
Journal of Physics A: Mathematical and General, **31** : 11 (20 March 1998) 2675–2690.

A22. Analytic description of singularities in Gowdy spacetimes,
Classical and Quantum Gravity, **15** : 5 (May 1998) 1339–1355 (avec A. D. Rendall).

A23. WTC expansions and non-integrable equations,
Studies in Applied Mathematics, **102** (1999) 1–26.

A24. Asymptotic behavior in polarized $\mathbf{T}^2$ –symmetric spacetimes,
Journal of Mathematical Physics, **40** : 1 (January 1999) 340–352 (avec J. Isenberg).

A25. Explosion et normes L^p pour l'équation des ondes non linéaire cubique,
C. R. Acad. Sci. Paris, Sér. I, **335** : 11 (1 Déc. 2002) 903–908. (avec G. Cabart).

A26. A linear Fuchsian equation with variable indices,
Journal of Differential Equations, **190** : 1 (1 May 2003) 64–80. (avec A. Bentrad)

A27. Stellar models and irregular singularities,
Communications in Contemporary Mathematics, **5** : 5 (2003) 719–735. (avec L. Jager)

A28. Régularité du rayon hyperbolique,
C. R. Acad. Sci. Paris, Sér. I, **338** : 1 (1 January 2004) 13–18.

A29. On a conjecture of Fefferman and Graham,
Advances in Mathematics, **184** : 2 (2004) 268–288.

A30. Boundary blow-up and degenerate equations,
Journal of Functional Analysis, **215** : 2 (2004) 271–289.

A31. Boundary behavior in the Loewner-Nirenberg problem,
Journal of Functional Analysis, **222** : 1 (2005) 98–113.

A32. Baudhāyana's rule for the quadrature of the circle,
Historia Mathematica. **33** : 2 (2006) 149–183.

A33. Renormalized variational principles and Hardy-type inequalities,
Differential and Integral Equations, **19** : 4 (2006) 437–448.

A34. Théorie des semi-groupes pour l'équation de Perona-Malik,
C. R. Acad. Sci. Paris, Ser. I, **344** : 4 (15 February 2007) 225–229.

A35. The Perona-Malik method as an edge pruning algorithm,
Journal of Mathematical Imaging and Vision, **30** (2008) 209–219.
http://dx.doi.org/10.1007/s10851-007-0029-2

A36. Hypergeometric functions and singular solutions of wave equations with Lorentz-invariant potential,
Communications in Contemporary Mathematics, **11** : 3 (2009) 447–458 (with A. Bentrad).
http://dx.doi.org/10.1142/S0219199709003466

A37. Soliton stars in the breather limit,
Classical and Quantum Gravity, **25** (2008) 245004 (12pp).
http://dx.doi.org/10.1088/0264-9381/25/24/245004

A38. Brahmagupta's derivation of the area of a cyclic quadrilateral,
Historia Mathematica, **37** (2010) 28–61.
http://dx.doi.org/10.1016/j.hm. 2009.08.004

A39. Improving Hölder's inequality,
Houston Journal of Mathematics, **36** : 1 (2010) 303–312.
http://www.math.uh.edu/~hjm/Vol36-1.html

A40. Review of "Mathematics in India" by Kim Plofker (Princeton U. Press, 2009), *Indo-Iranian Journal*, **53** : 4 (2010) 373–381.

A41. Quelques aspects de l'œuvre de Bhārati,
Journal Asiatique, **300** : 1 (2012) 167–194 (avec S. Kichenassamy).
http://dx.doi.org/10.2143/JA.300.1.2186340

A42. Brahmagupta's propositions on the perpendiculars of cyclic quadrilaterals,
Historia Mathematica, **39** : 4 (2012) 387–404.
http://dx.doi.org/10.1016/j.hm.2012.07.004

A43. L'Analyse Littéraire au service de l'Histoire des Mathématiques : Critique interne de la Géométrie de Brahmagupta,
Comptes-Rendus des Séances de l'Académie des Inscriptions et Belles-Lettres (CRAI) 2012, II (avril-juin) (2012) 781-796.

A44. Textual analysis of ancient Indian Mathematics,
Gaṇita Bhāratī, **33** : 1-2 (2011) 157-170.

A45. Control of blow-up singularities for nonlinear wave equations,
Evolution Equations and Control Theory, **2** : 4 (Dec. 2013) 667–677.
http://dx.doi.org/10.3934/eect.2013.2.669

A46. Continued proportions and Tartaglia's solution of cubic equations,
Historia Mathematica **42** (4) (Nov. 2015), 407-435.
http://dx.doi.org/10.1016/j.hm.2015.03.004

A47. Introduction à l'œuvre de S. Kichenassamy en Physique Théorique,
Annales de la Fondation Louis de Broglie **46** (2016), 131–151.
http://aflb.ensmp.fr/AFLB-411/aflb411m862.pdf

A48. « Une dialectique de l'être et du néant dans la philosophie tamoule médiévale : Hommage à S. Kichenassamy (1926–2015) »,
Journal Asiatique, **306** (1) (2018), 85–99.
http://dx.doi.org/10.2143/JA.306.1.3284957

A49. Review of "*Les mathématiques de l'autel védique. Le Baudhāyana Śulbasūtra et son commentaire Śulbadīpikā*" (Jean-Michel Delire, Droz, 2016),
Aestimatio, **13** (2016–2018), 119–140.
https://ircps.org/aestimatio/13/119-140

A50. « Le *pāvai nōṉpu* selon le Tiruppāvai, ou comment les rêves peuvent rencontrer la réalité »,
Journal Asiatique, **306** (2) (2018), 87–109.
https://dx.doi.org/10.2143/JA.306.2.3285615

A51. "Review of *The Mathematics of India : Concepts, Methods, Connections* (P. P. Divakaran, Hindustan Book Agency, 2018)". *Gaṇita Bhāratī*, **40** (2) (2018), 181–190.

A52. « L'irruption de l'infini : la légende de la colonne de lumière ».
Comptes-Rendus des Séances de l'Académie des Inscriptions et Belles-Lettres, ***CRAI*** **2018**, **162**(4) (novembre-décembre),1783-1799.

https://www.persee.fr/doc/crai_0065-0536_2018_num_162_4_96658

A53. "Brahmagupta's apodictic discourse",
Gaṇita Bhāratī, **41** (1) (2019), 93-113.
https://doi.org/10.32381/GB.2019.41.1-2.1

A54. « Mécanique ondulatoire et C-équivalence »,
Annales de la Fondation Louis de Broglie, **45** (1) (2020), 99-111.
http://aflb.minesparis.psl.eu/AFLB-451/aflb451m922.pdf

A55. « Translating Sanskrit mathematical texts »,
Réimpression de l'article A49 dans le premier numéro d'*Aestimatio*, N.S., **1** (2020) 183–204, avec une notice biographique.
https://doi.org/10.33137/aestimatio.v1i1.37625

A56. "Review of *Karaṇapaddhati of Putumana Somayājī* by Venketeswara Pai, K. Ramasubramanian, M.S, Sriram and M.D. Srinivas (Springer, 2018)", *Indian Journal of History of Science*, **56** (2021) 149-153.
https://doi.org/10.1007/s43539-021-00015-z

A57. "Apodictic discourse and the Cauchy-Bunyakovsky-Schwarz inequality",
Gaṇita Bhāratī, **42** (1) (2020), 129-147. DOI.

A58. "Hot spots in the Weak Detonation Problem and Special Relativity",
Axioms, **10** (4) 311 (2021) 17pp.
https://doi.org/10.3390/axioms10040311

A59. « La vie de Ratnamati 勒那漫提 dans le Xu Gaoseng Zhuan 續高僧傳 et la transmission de savoirs mathématiques en contexte bouddhique »,
Journal des savants (2002), 2, 299-328 (avec MA Ruixin 马瑞欣). HAL (CNRS archive).

A60. "Further examples of apodictic discourse, I",
Gaṇita Bhāratī, **43** (1) (2021), 93-120.
DOI : https://doi.org/10.32381/GB.2021.43.2.1

A61. "Further examples of apodictic discourse, II",
Gaṇita Bhāratī. **44** (1) (January-June 2022), 51–94.
DOI: https://doi.org/GB.2022.44.1.1

A62. *"*Axiomatics of the Observer Manifold and Relativity,"
Axioms **2023,** *12(2)*, 205, 1–16.
https://doi.org/10.3390/axioms12020205

A63. « Hétérométrie, cohérence et discours apodictique : la dérivation du théorème du carré de la diagonale chez Baudhāyana »,
Journal asiatique, **311**.2 (2023) : 267–303.
DOI: 10.2143/JA.311.2.3292914
https://poj.peeters-leuven.be/content.php?url=article&id=3292914

A64. "The Relativistic Rotation Transformation and the Observer Manifold,"
Axioms **2023**, *12(12)*, 1066, 1–26. https://doi.org/10.3390/axioms12121066

A65. « Une nouvelle dérivation de la distribution de Bose-Einstein avec énergie du point zéro »,
Annales de la Fondation Louis de Broglie, **48** (1) (2023-2024), 149-158.
https://fondationlouisdebroglie.org/AFLB-481/aflb481m1000.pdf

A66. "New perspectives on the development of the Indian positional system in the light of Sanskrit, Pali and Tamil sources,"
Gaṇita Bhāratī, **45** (1) (2023), 1-21. DOI.

A67. "Apodictic discourse and Sanskrit humanism in *L'Inde Classique : Manuel des Études Indiennes,* IX.5 (Mathematics)",
Journal Asiatique, **312**.1 (2024), 45–55.
DOI: 10.2143/JA.312.1.3293358
https://poj.peeters-leuven.be/content.php?url=article&id=3293358&journal_code=JA

A68. « Philologie et épistémologie mathématique en Inde ancienne », *Annuaire de l'École pratique des hautes études (EPHE), Section des sciences historiques et philologiques* [En ligne],
156 | 2025, 408-414.
URL : http://journals.openedition.org/ashp/8141 ;
DOI : https://doi.org/10.4000/13mua

A69. "A note on the limiting corner angle of liquid drops in the lubrication approximation,"
Axioms, **15**(2), (2026), article n° 117 (18 pp.)
URL : https://www.mdpi.com/2075-1680/15/2/117
DOI : https://doi.org/10.3390/axioms15020117

A70. "Geometric reinterpretations of partial differential applications and applications,"
Geometry, **3**(1), (2026), article n° 6 (12 pp.). Link DOI
URL : https://www.mdpi.com/3042-402X/3/1/6
DOI : https://doi.org/10.3390/geometry3010006

A71. « Philologie et épistémologie mathématique en Inde ancienne, II », *Annuaire de l'École pratique des hautes études (EPHE), Section des sciences historiques et philologiques* [En ligne],
157 | 2026, à paraître.

A72. « Geometric interpretations of partial differential equations and their functional settings, » *Pure and Applied Functional Analysis*, to appear. (in the special issue in honor of Allen Tannebaum.)

Comptes rendus d'ouvrages et d'articles pour le Zentralblatt für Mathematik *et les* Mathematical Reviews

A. Pour le *Zentralblatt für Mathematik* (230 recensions, accessibles via ce lien)

Ouvrages :

R-O1. Zbl 1320.35003 Ostrovsky, Lev
Asymptotic perturbation theory of waves. *(English)* London: Imperial College Press. xviii, 208 p. (2015). MSC: 35-02 35B20 35Q51

R-O2. Zbl 1320.35002 Galaktionov, Victor A.; Mitidieri, Enzo, L., Pohozaev, Stanislav I. Blow-up for Higher-Order Parabolic, Hyperbolic, Dispersion and Schrödinger Equations. (English). Monographs and Research Notes in Mathematics. CRC Press xxvi, 543 p. (2015). Boca Raton, FL: CRC Press (ISBN 978-1-4822-5172-2/hbk). xxvi, 543 (2015). MSC: 35-02 35B44 35G20 35Q53 35C06 35K25 35L25 35K59 35L77

R-O3. Zbl 1308.81001 Michelsen, Eric L.
Quirky Quantum Physics. Physical, conceptual, geometric, and pictorial physics that didn't fit in your textbook. (English) Undergraduate Lecture Notes in Physics. Springer xix, 361 p. (2014). MSC: 81-01 81P05 00A79

R-O4. Zbl 1245.35001 Cherrier, Pascal; Milani, Albert
Linear and quasi-linear evolution equations in Hilbert spaces. (English)
Graduate Studies in Mathematics 135. Providence, RI: American Mathematical Society (AMS). xviii, 377 p. (2012). MSC2000: *35-02 35K15 35K59

R-O5. Zbl 1202.35003 Girbau, Joan; Bruna, Lluís
Stability by linearization of Einstein's field equation. (English)
Progress in Mathematical Physics 58. Basel: Birkhäuser. xv, 208 p. (2010). MSC2000: *35-02 83C05 35Q76

R-O6. Zbl 1207.01034 Zweiacker, Pierre
Dead for science. (Morts pour la science.) (English)
Focus Science. Lausanne: Presses Polytechniques et Universitaires Romandes. x, 252 p. (2007). MSC2000: *01A70 01A99

R-O7. Zbl 0986.37068 Miwa, T.; Jimbo, M.; Date, E.
Solitons: differential equations, symmetries and infinite dimensional algebras. Transl. from the Japanese by Miles Reid. (English)
Cambridge Tracts in Mathematics. 135. Cambridge: Cambridge University Press. ix, 108 p. (2000). MSC2000: *37K40 37-02 35-02

R-O8. Zbl 0977.35014 Craig, Walter
Small divisor problems in partial differential equations. (Problèmes de petits diviseurs dans les équations aux dérivées partielles.) (French)

Panoramas et Synthèses. 9. Paris: Société Mathématique de France. viii, 120 p. (2000). MSC2000: *35B10 37K55

R-O9. Zbl 1044.00528 Starkl, Reinhard
Matter-field-structure. Repititorium of theoretical physics. (Materie-Feld-Struktur. Repititorium der Theoretischen Physik.) (German)
Braunschweig: Vieweg. xii, 559~S. (1998). MSC2000: *00A79 70-01 81-01

R-O10. Zbl 0834.34101 Bechtluft-Sachs, Stefan
On the η invariant of Dirac operators on manifolds with free circle action. (English)
Reihe Mathematik. Aachen: Verlag Shaker. i, 32 p. (1993). MSC2000: *34L40

R-O11. Zbl 0820.35001 Alinhac, Serge
Blowup for nonlinear hyperbolic equations. (English)
Progress in Nonlinear Differential Equations and their Applications. 17. Boston: Birkhäuser. xiv, 112 p. (1995). MSC2000: *35-02 35L67 35B20

R-O12. Zbl 0816.35002 Rubinstein, Isaak; Rubinstein, Lev
Partial differential equations in classical mathematical physics. (English)
Cambridge: Cambridge University Press. xiv, 676 p. (1993). MSC2000: *35-02 35Q99 35-01

R-O13. Zbl 0679.35016 Hamburger, Christoph
Regularity of differential forms minimizing degenerate elliptic functionals. (English)
Bonner Mathematische Schriften, 199. Bonn: Univ. Bonn, Math.-Naturwiss. Fak., Diss. 106 p. (1989). MSC2000: *35D10 35J65

R-O14. Zbl 1384.83001 Giulini, Domenico; Kiefer, Claus
Gravitational waves. Insight into theory, prediction and discovery. (Gravitationswellen. Einblicke in Theorie, Vorhersage und Entdeckung.) *(German)*
Essentials. Wiesbaden: Springer Spektrum (ISBN 978-3-658-16012-8/pbk; 978-3-658-16013-5/ebook). ix, 54 p. (2017). MSC: 83-02 83C35 83F05 85A40 00A79 83C45 97M50

R-O15. Zbl 1409.53002 Steeb, Willi-Hans
Problems and solutions in differential geometry, Lie series, differential forms, relativity and applications. *(English)*
Hackensack, NJ: World Scientific (ISBN 978-981-3230-82-8/hbk; 978-981-3232-96-9/ebook). xi, 284 p. (2018).

R-O16. Zbl 1411.35004 Li, Tatsien; Zhou, Yi
Nonlinear wave equations. Translated from the Chinese by Yachun Li. *(English)*
Series in Contemporary Mathematics 2. Berlin: Springer; Shanghai: Shanghai Scientific and Technical Publishers (ISBN 978-3-662-55723-5/hbk; 978-3-662-55725-9/ebook). xiv, 391 p. (2017). MSC: 35-02 35A01 35L15 35L72 35B44

Articles: (seules les recensions publiées après 2010 sont mentionnées ci-dessous).

Zbl 1540.53059 Benatti, Luca; Fogagnolo, Mattia; Mazzieri, Lorenzo
The asymptotic behaviour of p

-capacitary potentials in asymptotically conical manifolds.
Math. Ann. 388, No. 1, 99-139 (2024).

Zbl 1540.57041 Teramoto, Keisuke
Focal surfaces of fronts associated to unbounded principal curvatures.
Rocky Mt. J. Math. 53, No. 5, 1587-1608 (2023).

Zbl 07708765 Wardhaugh, Benjamin
'The admonitions of a good-natured reader'. Marks of use in Georgian mathematical textbooks.
Beeley, Philip (ed.) et al., Reading mathematics in early modern Europe. Studies in the production, collection, and use of mathematical books. Material Readings in Early Modern Culture. New York, NY: Routledge. 230-251 (2021).

Zbl 07565389 Gasperín, E.; Williams, J. L.
The conformal Killing spinor initial data equations.
J. Geom. Phys. 179, Article ID 104615, 24 p. (2022).

Zbl 07536909 Mari, Luciano; Rigoli, Marco; Setti, Alberto G.
On the 1/H-flow by p-Laplace approximation: new estimates via fake distances under Ricci lower bounds.
Am. J. Math. 144, No. 3, 779-849 (2022).

Zbl 1490.35189 de S. Carvalho, Francisco G.; de A. Cavalcante, Marcos P.
On the fundamental tone of the p-Laplacian on Riemannian manifolds and applications.
J. Math. Anal. Appl. 506, No. 2, Article ID 125703, 8 p. (2022).

Zbl 1493.53057 Rademacher, Hans-Bert
Critical values of homology classes of loops and positive curvature.
J. Differ. Geom. 119, No. 1, 141-159 (2021).

Zbl 1473.53003 Verstraelen, Leopold
Submanifold theory – a contemplation of submanifolds. (English)
Van der Veken, Joeri (ed.) et al., Geometry of submanifolds. AMS special session in honor of Bang-Yen Chen's 75th birthday, University of Michigan, Ann Arbor, Michigan, October 20–21, 2018. Providence, RI: American Mathematical Society (AMS). Contemp. Math. 756, 21-56 (2020).

Zbl 1473.35384 Ringström, Hans
Linear systems of wave equations on cosmological backgrounds with convergent asymptotics. (English)
Astérisque 420. Paris: Société Mathématique de France (SMF) (ISBN 978-2-85629-926-5/pbk). xi, 510 p. (2020).

Zbl 1455.35029 Ishiwata, Tetsuya; Sasaki, Takiko
The blow-up curve of solutions to one dimensional nonlinear wave equations with the Dirichlet boundary conditions. (English)
Japan J. Ind. Appl. Math. 37, No. 1, 339-363 (2020).

Zbl 1455.35028 Ikeda, Masahiro; Sobajima, Motohiro; Wakasa, Kyouhei

Blow-up phenomena of semilinear wave equations and their weakly coupled systems. (English)
J. Differ. Equations 267, No. 9, 5165-5201 (2019).

Zbl 1451.14033 Li, Yang
Local Nahm transform and singularity formation of ASD connections. (English)
Commun. Math. Phys. 375, No. 2, 1041-1078 (2020).

Zbl 1439.35343 Yang, Yanbing; Xu, Runzhang
Nonlinear wave equation with both strongly and weakly damped terms: supercritical initial energy finite time blow up. (English)
Commun. Pure Appl. Anal. 18, No. 3, 1351-1358 (2019).

Zbl 1439.35096 Wakasa, Kyouhei; Yordanov, Borislav
Blow-up of solutions to critical semilinear wave equations with variable coefficients. (English)
J. Differ. Equations 266, No. 9, 5360-5376 (2019).

Zbl 1439.35093 Novruzov, Emil
Local-in-space blow-up criteria for a class of nonlinear dispersive wave equations. (English)
J. Differ. Equations 263, No. 9, 5773-5786 (2017).

Zbl 1414.34067 Costin, Rodica D.; Park, Hyejin; Schlag, Wilhelm
The Weber equation as a normal form with applications to top of the barrier scattering. *(English)*
J. Spectr. Theory 8, No. 2, 347-412 (2018). MSC: 34L25 33C15 34M60 81Q20

Zbl 1393.53003 Dalakov, Peter
Lectures on Higgs moduli and abelianisation.
J. Geom. Phys. 118, 94-125 (2017). MSC: 53-02 37K15 14D21 14H70

Zbl 1378.81038 Kanazawa, Tomoyo; Yoshioka, Akira
Quasi-classical calculation of eigenvalues: examples and questions.
Kielanowski, Piotr (ed.) et al., Geometric methods in physics. XXXIV workshop, Białowieża, Poland, June 28 – July 4, 2015. Basel: Birkhäuser/Springer. Trends in Mathematics, 69-77 (2016). MSC: 81Q20 35P15

Zbl 1382.35146 Fang, Daoyuan
Methods and techniques in wave equation analysis.
RIMS Kôkyûroku Bessatsu B60, 33-104 (2016).
MSC: 35L05 35L71 42B25 46E35 35-02

Zbl 1359.35115 Hamza, M. A.
The blow-up rate for strongly perturbed semilinear wave equations in the conformal regime without a radial assumption.
Asymptotic Anal. 97, No. 3-4, 351-378 (2016).
MSC: 35L71 35B44

Zbl 1361.35114 Ikeda, Masahiro; Ogawa, Takayoshi

Lifespan of solutions to the damped wave equation with a critical nonlinearity.
J. Differ. Equations 261, No. 3, 1880-1903 (2016). MSC: 35L71 35B44 35L15

Zbl 1378.35202 Wang, Jinhua; Yu, Pin
A large data regime for nonlinear wave equations.
J. Eur. Math. Soc. (JEMS) 18, No. 3, 575-622 (2016). 35L71 35A01 35L15

Zbl 1343.35023 Kmit, I.; Recke, L.
Solution regularity and smooth dependence for abstract equations and applications to hyperbolic PDEs.
J. Differ. Equations 259, No. 11, 6287-6337 (2015). MSC: 35B30 35B10 47J07 35L60 35L50 35L20 35L71

Zbl 1338.53074 Wang, Yaohua; Xie, Naqing; Zhang, Xiao
The positive energy theorem for asymptotically anti-de Sitter spacetimes.
Commun. Contemp. Math. 17, No. 4, Article ID 1550015, 24 p. (2015). MSC: 53C27 53C80 83C40

Zbl 06466593 Lee, Dan A.; LeFloch, Philippe G.
The positive mass theorem for manifolds with distributional curvature.
Commun. Math. Phys. 339, No. 1, Article ID 2414, 99-120 (2015). MSC: 53C27 53C80

Zbl 1320.53066 Rodrigues Jr., Waldyr A.; Wainer, Samuel A.
A Clifford bundle approach to the differential geometry of branes.
Adv. Appl. Clifford Algebr. 24, No. 3, 817-847 (2014). MSC: 53C40 81T30

Zbl 1319.35151 Galstian, Anahit; Yagdjian, Karen
Microlocal analysis for waves propagating in Einstein & de Sitter spacetime. Math. Phys. Anal. Geom. 17, No. 1-2, 223-246 (2014). MSC: 35Q05 35Q75

Zbl 1303.32002 Zelditch, Steve
Ergodicity and intersections of nodal sets and geodesics on real analytic surfaces.
J. Differ. Geom. 96, No. 2, 305-351 (2014). MSC2000: *32A25 58J51 58J40

Zbl 1308.35146 Andersson, Lars; Oliynyk, Todd A.
A transmission problem for quasi-linear wave equations.
J. Differ. Equations 256, No. 6, 2023-2078 (2014). MSC2000: *35L52 35L72 35R05

Zbl 1277.35074 Korpusov, M.O.
Blow-up of solutions of strongly dissipative generalized Klein-Gordon equations. (English. Russian original)
Izv. Math. 77, No. 2, 325-353 (2013); translation from Izv. Ross. Akad. Nauk, Ser. Mat. 77, No. 2, 109-138 (2013). MSC2000: *35B44 35L15 35L72

Zbl 1277.53088 Toth, John A.; Zelditch, Steve
Quantum ergodic restriction theorems: manifolds without boundary.
Geom. Funct. Anal. 23, No. 2, 715-775 (2013). MSC2000: *53D25 58J51 58J40

Zbl 1292.34084 Niikuni, Hiroaki
On the degenerate spectral gaps of the 1D Schrödinger operators with 4-term periodic delta potentials.
Far East J. Math. Sci. (FJMS) 78, No. 1, 131-155 (2013). MSC2000: *34L40 34L15

Zbl 1284.35264 Pişkin, Erhan; Polat, Necat
Global existence, decay and blow up solutions for coupled nonlinear wave equations with damping and source terms.
Turk. J. Math. 37, No. 4, 633-651 (2013). MSC2000: *35L53 35A01 35B44

Zbl 1284.35288 Hamza, Mohamed-Ali; Zaag, Hatem
Blow-up results for semilinear wave equations in the superconformal case.
Discrete Contin. Dyn. Syst., Ser. B 18, No. 9, 2315-2329 (2013). MSC2000: *35L71 35B44

Zbl 1252.35246 Bohle, Christoph
Constant mean curvature tori as stationary solutions to the Davey-Stewartson equation. (English)
Math. Z. 271, No. 1-2, 489-498 (2012). MSC2000: *35Q55 37K10 53C42

Zbl 1284.35289 Kenig, Carlos E.
The concentration-compactness rigidity method for critical dispersive and wave equations. (English)
Cabré, Xavier (ed.) et al., Nonlinear partial differential equations. Lecture notes from the school on topics in PDE's and applications, Granada and Barcelona, Spain, 2008. Basel: Birkhäuser. Advanced Courses in Mathematics - CRM Barcelona, 117-149 (2012). MSC2000: *35L71 35B44

Zbl 1277.35014 Vasy, András
The wave equation on asymptotically anti de Sitter spaces. (English)
Anal. PDE 5, No. 1, 81-144 (2012). MSC2000: *35A21 35A18 58J45

Zbl 1255.35016 D'ancona, Piero; Foschi, Damiano; Selberg, Sigmund
Atlas of products for wave-Sobolev spaces on $\Bbb{R}^{1+3}$. (English)
Trans. Am. Math. Soc. 364, No. 1, 31-63 (2012). MSC2000: *35A23 46E35 35L05

Zbl 1245.34018 Hao, Xiaoling; Sun, Jiong; Zettl, Anton
Canonical forms of self-adjoint boundary conditions for differential operators of order four. (English)
J. Math. Anal. Appl. 387, No. 2, 1176-1187 (2012). MSC2000: *34B09 34L40 34B15

Zbl 1270.35320 Merle, Frank; Zaag, Hatem
Isolatedness of characteristic points at blowup for a 1-dimensional semilinear wave

equation. (English)
Duke Math. J. 161, No. 15, 2837-2908 (2012). MSC2000: *35L71 35B44

Zbl 1298.35119 Kenig, Carlos E.; Merle, Frank
Radial solutions to energy supercritical wave equations in odd dimensions. (English)
Discrete Contin. Dyn. Syst. 31, No. 4, 1365-1381 (2011). MSC2000: *35L71 35B40 35L05

Zbl 1270.35322 Holden, Helge; Raynaud, Xavier
Global semigroup of conservative solutions of the nonlinear variational wave equation. (English)
Arch. Ration. Mech. Anal. 201, No. 3, 871-964 (2011). MSC2000: *35L72 35L15 35R06

Zbl 1221.53093 Calvaruso, G.
Harmonicity properties of invariant vector fields on three-dimensional Lorentzian Lie groups. (English)
J. Geom. Phys. 61, No. 2, 498-515 (2011). MSC2000: *53C43 53C50 58E20

Zbl 1243.35122 Aloui, L.; Ibrahim, S.; Nakanishi, K.
Exponential energy decay for damped Klein-Gordon equation with nonlinearities of arbitrary growth. (English)
Commun. Partial Differ. Equations 36, No. 4-6, 797-818 (2011). MSC2000: *35L71 35B40

Zbl 1255.35162 Germain, Pierre
Global existence for coupled Klein-Gordon equations with different speeds. (English. French summary)
Ann. Inst. Fourier 61, No. 6, 2463-2506 (2011). MSC2000: *35L52 35L71 35B34

Zbl 1230.35068 Killip, Rowan; Visan, Monica
The defocusing energy-supercritical nonlinear wave equation in three space dimensions. (English)
Trans. Am. Math. Soc. 363, No. 7, 3893-3934 (2011). MSC2000: *35L71 35L15 35B45

Zbl 1230.35069 Takamura, Hiroyuki; Wakasa, Kyouhei
The sharp upper bound of the lifespan of solutions to critical semilinear wave equations in high dimensions. (English)
J. Differ. Equations 251, No. 4-5, 1157-1171 (2011). MSC2000: *35L71 35B33 35B44

Zbl 1229.35143 Stefanov, Atanas
Global regularity for the minimal surface equation in Minkowskian geometry. (English)
Forum Math. 23, No. 4, 757-789 (2011). MSC2000: *35L70 49Q15 53B30

Zbl 1230.35062 Zhou, Jun; Mu, Chunlai
The lifespan for 3D quasilinear wave equations with nonlinear damping terms. (English)
Nonlinear Anal., Theory Methods Appl., Ser. A, Theory Methods 74, No. 16, 5455-5466 (2011). MSC2000: *35L53 35B44 35L71

Zbl 1223.83037 Skenderis, Kostas; van Rees, Balt C.
Holography and wormholes in $2+1$ dimensions. (English)
Commun. Math. Phys. 301, No. 3, 583-626 (2011). MSC2000: *83C80 83C57 53C50

Zbl 1213.35146 Zhou, Yi; Han, Wei
Blow-up of solutions to semilinear wave equations with variable coefficients and boundary. (English)
J. Math. Anal. Appl. 374, No. 2, 585-601 (2011). MSC2000: *35B44 35L71 35L20

Zbl 1253.34076 Tulovsky, Vladimir
On the eigenfunctions and eigenvalues of the Schrödinger operator. IV. (English)
Indian J. Math. 52, Suppl., 21-56 (2010). MSC2000: *34L40 34L10 34L15

Zbl 1220.35177 Salort, Delphine
Dispersion properties of kinetics equations and applications to the Vlasov-Poisson equation. (Propriétés dispersives pour des équations cinétiques et applications à l'équation de Vlasov-Poisson.) (French)
Sémin. Équ. Dériv. Partielles, Éc. Polytech., Cent. Math. Laurent Schwartz, Palaiseau 2008-2009, 1-16 (2010). MSC2000: *35Q83 35D30

Zbl 1213.35314 Metcalfe, Jason; Sogge, Christopher D.
Global existence for high dimensional quasilinear wave equations exterior to star-shaped obstacles. (English)
Discrete Contin. Dyn. Syst. 28, No. 4, 1589-1601 (2010). MSC2000: *35L72 35A01 35L20

Zbl 1211.83019 Dafermos, Mihalis; Rodnianski, Igor
A new physical-space approach to decay for the wave equation with applications to black hole spacetimes. (English)
Exner, Pavel (ed.), XVIth international congress on mathematical physics, Prague, Czech Republic, August 3--8, 2009. With DVD. Hackensack, NJ: World Scientific. 421-432 (2010). MSC2000: *83C57 35L05 83A05

Zbl 1194.34158 Niikuni, Hiroaki
Coexistence problem for the one-dimensional Schrödinger operators with the double or triple periodic $\delta ^{(1)}$-interactions. (English)
J. Math. Anal. Appl. 366, No. 1, 283-296 (2010). MSC2000: *34L40 34L05

Zbl 1202.49013 Lenzmann, Enno; Lewin, Mathieu
Minimizers for the Hartree-Fock-Bogoliubov theory of neutron stars and white dwarfs. (English)
Duke Math. J. 152, No. 2, 257-315 (2010). MSC2000: *49J40 85A15

B. **Pour les *Mathematical Reviews* (74 recensions, disponibles ici)**

NB : Ici encore, on ne mentionne que les comptes-rendus rédigés depuis 2010.

Ouvrages :

MR4298725 - Toscano, Fabio, *The secret formula—how a mathematical duel inflamed Renaissance Italy and uncovered the cubic equation,* Princeton University Press, Princeton, NJ, 2020, viii+161 pp.

MR4321540 - Petrocchi, Alessandra, *The Gaṇitatilaka and its commentary—two medieval Sanskrit mathematical texts*, Sci. Writ. Anc. Mediev. World, CRC Press, Boca Raton, FLRoutledge/Taylor & Francis Group, London, 2019, xii+437 pp.

Articles :

MR4635633 - Global solvability for nonlinear wave equations with singular potential
Georgiev, Vladimir; Kubo, Hideo
J. Differential Equations 375 (2023), 514–537.

MR4516745 - Convergence of the Fefferman-Graham expansion and complex black hole anatomy
Serantes, Alexandre; Withers, Benjamin
Classical Quantum Gravity 39 (2022), no. 24, Paper No. 245010, 36 pp.

MR4234816 - D'Abbicco, Marcello,
Small data solutions for the Euler-Poisson-Darboux equation with a power nonlinearity
J. Differential Equations 286 (2021), 531–556.

MR4026182 - Sire, Yannick; Sogge, Christopher D.; Wang, Chengbo,
The Strauss conjecture on negatively curved backgrounds
Discrete Contin. Dyn. Syst. 39 (2019), no. 12, 7081–7099.

MR3930845 - Azaiez, Asma; Masmoudi, Nader; Zaag, Hatem,
"Blow-up rate for a semilinear wave equation with exponential nonlinearity in one space dimension", London Math. Soc. Lecture Note Ser., 450, Cambridge University Press, Cambridge, 2019, 1–32.

MR4154871 - Basyal, Deepak,
"A mathematical poetry book from Nepal",
Br. J. Hist. Math. 35 (2020), no. 3, 189–206.

MR3916641 Dodson, Benjamin, Global well-posedness and scattering for the radial, defocusing, cubic wave equation with almost sharp initial data, Commun. PDE, 43 (10) (2018) 1413–1455.

MR3841854 Snelson, Stanley, Asymptotic stability for odd perturbations of the stationary kink
in the variable-speed φ^4 model, Trans. AMS, 370 (10) (2018) 7437–7460.

MR3445199 Jerrard, Robert L.; Smets, Didier Vortex dynamics for the two-dimensional non-homogeneous Gross-Pitaevskii equation. Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) 14 (2015), no. 3, 729–766.

MR3396218 Ostrovsky, L.; Pelinovsky, E.; Shrira, V.; Stepanyants, Y. Beyond the KdV: post-explosion development. Chaos 25 (2015), no. 9, 097620, 13 pp.

MR3344675 Majdoub, Mohamed; Masmoudi, Nader. On uniqueness for supercritical nonlinear wave and Schrödinger equations. *Int. Math. Res. Not. IMRN* 2015, no. 9, 2386–2405.

MR3286511 Johnson, Mathew A.; Noble, Pascal; Rodrigues, L. Miguel; Zumbrun, Kevin Spectral stability of periodic wave trains of the Korteweg–de Vries/Kuramoto-Sivashinsky equation in the Korteweg–de Vries limit. *Trans. Amer. Math. Soc.* 367 (2015), no. 3, 2159-2212.

MR3511074 Knudsen, Toke Versified sine tables in Jñānarāja's Siddhāntasundara. *Indian J. Hist. Sci.* 49 (2014), no. 2, 127-141. 01A32

MR3221976 Plofker, Kim. Treatises and tables, algorithms and approximations: the role of computation in early modern Sanskrit astronomy. *Gaṇita Bhāratī* 34 (2012) 85-103.

MR3171774 Coclite, Giuseppe Maria ; di Ruvo, Lorenzo . Convergence of the Ostrovsky equation to the Ostrovsky-Hunter one. *J. Differential Equations* 256 (2014), no. 9, 3245-3277.

MR3138094 Besse, Christophe ; Carles, Rémi ; Méhats, Florian . An asymptotic preserving scheme based on a new formulation for NLS in the semiclassical limit.
Multiscale Model. Simul. 11 (2013), no. 4, 1228-1260.

MR3086397 Sugiyama, Yuusuke . Global existence of solutions to some quasilinear wave equation in one space dimension.
Differential Integral Equations 26 (2013), no. 5-6, 487-504.

MR3002557 Han, Lijia ; Zhang, Jingjun ; Gan, Zaihui ; Guo, Boling . Cauchy problem for the Zakharov system arising from hot plasma with low regularity data.
Commun. Math. Sci. 11 (2013), no. 2, 403-420.

MR3010238 You, Shujun ; Guo, Boling ; Ning, Xiaoqi . Initial boundary value problem for generalized Zakharov equations.
Appl. Math. 57 (2012), no. 6, 581-599.

MR2927574 Tersenov, Alkis S. A condition guaranteeing the absence of the blow-up phenomenon for the generalized Burgers equation.
Nonlinear Anal. 75 (2012), no. 13, 5119-5122.

MR2859856 Jerrard, Robert . Defects in semilinear wave equations and timelike minimal surfaces in Minkowski space.
Anal. PDE 4 (2011), no. 2, 285-340.

MR2824064 Ablowitz, M. J. ; Nixon, S. D. ; Horikis, T. P. ; Frantzeskakis, D. J. Perturbations of dark solitons.
Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. 467 (2011), no. 2133, 2597-2621.

MR2802022 Dias, João Paulo ; Figueira, Mário ; Frid, Hermano . Vanishing viscosity with short wave–long wave interactions for multi-D
scalar conservation laws.
J. Differential Equations 251 (2011), no. 3, 492-503.

MR2737432 Benci, Vieri ; Ghimenti, Marco ; Micheletti, Anna Maria . The nonlinear Schroedinger equation: solitons dynamics.
J. Differential Equations 249 (2010), no. 12, 3312-3341.

MR2718259 Klopp, Frédéric ; Nakamura, Shu . Lifshitz tails for generalized alloy-type random Schrödinger operators.
Anal. PDE 3 (2010), no. 4, 409-426.

MR2666126 Fan, Jishan ; Jiang, Song ; Nakamura, Gen . Inverse problem of a time-dependent Gingzburg-Landau model for superconductivity with the final overdetermination.
Osaka J. Math. 47 (2010), no. 1, 89-108.

MR2591971 Zhang, Ping ; Zheng, Yuxi . Conservative solutions to a system of variational wave equations of nematic liquid crystals.
Arch. Ration. Mech. Anal. 195 (2010), no. 3, 701-727.

MR2578477 Bizoń, P. ; Breitenlohner, P. ; Maison, D. ; Wasserman, A. Self-similar solutions of the cubic wave equation.
Nonlinearity 23 (2010), no. 2, 225-236.

Recent talks/conférences récentes.

1. Fondation Louis de Broglie, Paris, 1er juin 2026.
2. « Du rite à l'amour : les dimensions culturelles de l'alimentation en Inde », 22 mai 2026.
   Communication à l'Académie des Inscriptions et Belles-Lettres, dans le cadre du colloque *L'Alimentation en Asie*, 21-22 mai 2026.
   (Colloque de la Société asiatique, Collège de France et Académie des Inscriptions et Belles-Lettres, Paris).
3. « Pierre-Sylvain Filliozat et le *Śaivasiddhānta* », Colloque international pour le 50e anniversaire de l'AFEI : Hommage à Pierre-Sylvain Filliozat (1936-2024), Collège de France et EFEO, 12-13 mai 2026. Programme
4. « The development of mathematical thought as documented in the Vedic ritual corpus », Vedic Workshop 9, Liège, Belgium, 16-20 fév., 2026.
5. « Mathematical reasoning as an outgrowth of Vedic ritual », History of Science in Early South Asia, séminaire organisé en ligne par le Consortium for History of science, technology and medicine (CHSTM), lundi 26 janvier, 2026, 10:30 am - 12:00 pm EST https://www.chstm.org/group/history-science-early-south-asia
6. « La femme inviolable : l'héroïsme de la fortitude en Inde ancienne,
   La fabrique du héros en Asie, May 15-16, 2025.

(Colloque de la Société asiatique, Collège de France et Académie des Inscriptions et Belles-Lettres, Paris).

7. « Indian knowledge systems underlying the invention of rigorous mathematical reasoning »,
Reimagining and Reclaiming the Knowledge Traditions of Bharat: Beyond Boundaries and Definitions, School of Social Sciences, Jawaharlal Nehru University, New Delhi, March 3-4, 2025.

8. « La perspective de Louis de Broglie sur la Mécanique ondulatoire et son actualité », à l'occasion du centenaire de la Thèse de Louis de Broglie, École des Mines, Paris, 16 nov. 16, 2024. Site Link to YouTube video

9. « Introduction aux textes philosophiques du fonds Ariel de la Bibliothèque nationale de France », Communication à la Société Asiatique, 13 décembre 2024, Paris.

10. « Mesure, rythme et temps dans la musique classique de l'Inde du Sud », Colloque LangArts 2023, juin 2023, Paris.

11. « La liberté de l'enfant d'après les sources sanskrites et tamoules et l'humanisme scientifique indien », Colloque de la Société Asiatique, avril 2023, Paris.

12. « L'histoire des mathématiques indiennes : Impact sur l'enseignement », Séminaire d'Histoire des mathématiques, IREM de Reims, 8 mars 2023.

13. "Further examples of Apodictic discourse",
International Conference on History of Mathematics, November 25-27, 2022. (Indian Society for History of Mathematics, IIT Madras, Chennai, India.)

14. "A critique of the notion of absolute beginning in Indian philosophy and iconography",
Images and Stories of the Origin(s) of the World and Humankind. Organised by Prof. Dr Marion Gymnich and Prof. Dr Julia A. B. Hegewald (Bonn University, Germany). Online conference, 3-4 November, 2020. Conference page

15. "Tunstall, Pacioli and Tartaglia's English Connection : Facts and Perspectives",
Reappraising the 'Art of Counting'. An international symposium to celebrate 500 years of Cuthbert Tunstall's De arte supputandi libri quattuor. Organised by the British Society for the History of Mathematics and the Department of Mathematical Sciences at Durham University, Durham, U.K. (9-10 September 2022). Conference page

16. "Liouville's hyperbolic and elliptic equations and their mathematical and physical interpretations" (with E. M. Bogatov),
Seminar on the History of Mathematics, St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences (May 5, 2022). Link to video and slides in English and Russian.

17. "What anyone should know about Indian Mathematics",
Colloquium, April 15, 2022. This is part of the 75th anniversary celebrations of Indian independence. (Harish-Chandra Research Institue, Prayagraj (ex-Allahabad), India.)

18. "The Euler-Poisson Darboux equations in the development of the theory of partial differential equations",

Seminar on the History of Mathematics, St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences (April 7, 2022). Link to video and slides in English and Russian.

19. "Apodictic discourse and freedom of thought in Indian Mathematics", *International Conference on History of Mathematics*, December 16-18, 2021. (Indian Society for History of Mathematics, Department of Mathematics, Ramjas College, Delhi, India.)

20. "Apodictic discourse : a new paradigm for rational communication?", *History of Mathematics Seminar Series* IIT Gandhinagar, September 17, 2021.

21. "Geometry without figures : Mathematics as apodictic discourse in Indian texts", *International Conference on Ancient Indian Astronomy and Mathematics, with Special reference to Kerala*, Sreekrishnapuram V.T. Bhattathiripad College, Mannampatta, Palakkad, India, July 26-28, 2021. Link to YouTube video

22. "The Cauchy-Bunyakovsky-Schwarz inequality and its mathematical interpretations", *Seminar on the History of Mathematics*, St. Petersburg Department of Steklov Mathematical Institute of Russian Academy of Sciences (April 15, 2021). Link to video and slides in English and Russian See also article number 71.

23. "On the impact of History on modern research and teaching", *International web-conference on History of Mathematics*, Delhi, India, December 20-22, 2020. Organized by the Indian Society for History of Mathematics. Slides on HAL.

24. "Apodictic discourse in ancient and modern Mathematics", *Online International Workshop on Srinivasa Ramanujan: The Man Beyond Infinity : Celebrating the National Mathematics Day on the occasion of 133th Birth Year of Srinivasa Ramanujan.* (Central University of Himachal Pradesh, Shahpur, India), December 22, 2020.

25. "Brahmagupta's Apodictic Discourse", *ICHDMAST 2019 (International Conference on the History and Recent Developments in Mathematics with Applications in Science and Technology)*, New Vallabh Vidyanagar (India), December 17-19, 2019.

26. *Lectures at the Chennai Mathematical institute* (Chennai, India, December 4, 6 and 8, 2019).

    - "Recent progress on the analysis of ancient Indian mathematical texts".
    - "The impact and modern relevance of ancient Indian mathematics".
    - "Algebraic aspects of Fuchsian Reduction".

27. "Henry Thomas Colebrooke and the nature of Brahmagupta's mathematical discourse", *H.T. Colebrooke and Historiographies of Sciences in Sanskrit*, Apr. 15-16, 2019, Univ. Paris Diderot. Link Other link

28. « Les problèmes indéterminés en Inde », Séminaire *Histoire et Philosophie des Sciences*, U. Paris Diderot (March 11, 2019).

29. « L'Analyse comme discipline, héritière de l'algèbre et de la géométrie »,
Séminaire d'Histoire des Mathématiques, Université de Marne-la-Vallée (April 25, 2017).

30. « L'articulation des concepts, des objets et des pratiques mathématiques : quelques exemples »,
Séminaire *Histoire et Philosophie des Sciences*, U. Paris Diderot (February 20, 2017).