

CURRICULUM VITAE

Diana Savin

PERSONAL DATA

Date of birth:

Nationality: ROMANIAN

Full name/ address of permanent Institution:

Department of Mathematics and Computer Science

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Transilvania University of Braşov

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EDUCATION

1999-2004 - Ph.D. in Mathematics (Algebra / Number Theory), Ovidius University of
Constanţa, Romania

My Ph.D thesis was discussed and approved by the high comission of the
Ministry of Education and Research from Romania in April 2005 and
issued in May 2005.

1991- 1996 – University of Bucharest, Faculty of Mathematics, Romania.

EMPLOYMENT

October 1, 2022- present: Associate Professor - Faculty of Mathematics and Computer Science,
Transilvania University of Braşov.

2021-2022: Senior Lecturer - Faculty of Mathematics and Computer Science, Transilvania University of
Braşov.

2005 – 2021: Senior Lecturer - Faculty of Mathematics and Computer Science, Ovidius University of
Constanta.

2002 – 2005: Teaching assitant - Faculty of Mathematics and Computer Science, Ovidius University of
Constanta

1997 – 2002: math teacher – Andrei Barseanu Economic high school (Titular Teacher, job obtained after
passing a national competition), Brasov, Romania + detachment (since 1998) with a half norm at Dr. Ioan
Mesota high school, Brasov, Romania

1996 – 1997: math teacher - Rulmentul high school, Brasov, Romania (Titular Teacher, job obtained after
passing a national competition)

RESEARCH INTERESTS

Algebraic Number Theory:

- Algebraic number fields, Galois theory,
- Ramification theory in algebraic number fields,

- Class field theory,
- Diophantine Equations,
- Elliptic Curves, L-functions;

Associative Algebras (aspects of algebraic number theory):

- Quaternion algebras, orders
- Symbol algebras;
- Other central simple algebras.

Combinatorics:

- Fibonacci and Lucas numbers, Pell numbers, Horadam numbers, generating functions, difference equations, etc.

RESEARCH ACTIVITIES ABROAD

1. January 4, 2008 – April 1, 2008, post-doctoral position at Central European University from Budapest. Adviser: Tamas Szamuely (senior researcher at A. Renyi Institute of Mathematics, Hungarian Academy of Sciences).
2. July 14, 2011 – August 14, 2011, visiting researcher fellowship at The Abdus Salam International Centre for theoretical Physics, Trieste, Italy.
3. January 7, 2012 – March 31, 2012, visiting researcher fellowship at Centre de Recerca Matemàtica, Facultat de Ciències, Universitat Autònoma de Barcelona, Spain.

GRANTS

1. Member in the grant A CNCSIS 1075/2005: Algebra computationally and applications in geometry and informatics.
2. Director of the grant: **Workshop on Algebraic and Analytic Number Theory and Their Applications**, Constanta, May 23-24, 2013 (<http://math.univ-ovidius.ro/Workshop/2013/Number-Theory/>) (this workshop was supported by [UEFISCDI, by the project PN-II-ID-WE-2012-4-161](http://uefiscdi.gov.ro/userfiles/file/PN%20II_WE%20si%20SSA%202012/WE/REZULTATE%20FINAL%20E/lista%20FINALA%20workshop-uri%20_6%20etapa%20-pana%20pe30%20august%202012.pdf)) (http://uefiscdi.gov.ro/userfiles/file/PN%20II_WE%20si%20SSA%202012/WE/REZULTATE%20FINAL%20E/lista%20FINALA%20workshop-uri%20_6%20etapa%20-pana%20pe30%20august%202012.pdf)).
3. Member in the grant PROWEB (Rețea de formare continuă a cadrelor didactice pentru a utiliza multimedia, instrumentația virtuală și web 2.0 în aria curriculară Matematică și științe ale naturii), 2015, director of the project: Assoc. Prof. Ph.D Eugen Petac.
4. Member in the grant ANCSI-LIT-TH-ST-2016-0020, director of the project: Assoc. Prof. Ph.D Cristina Flaut.
5. Member in the grant grant 13L/2017, director of the project: Assoc. Prof. Ph.D Cristina Flaut.
6. Member in the grant grant 16L/2018, director of the project: Assoc. Prof. Ph.D Cristina Flaut.
7. Member in the grant grant 31L/2019, director of the project: Assoc. Prof. Ph.D Cristina Flaut.
8. Member in the grant grant ROSE (2020), director of the project: Lect. Ph.D Constantin Buta.
9. Member in the grant grant ROSE (2021), director of the project: Lect. Ph.D Cosmin Filip.

Mobility GRANTS

1. CANT 2006, University of Liege, Belgique, May 2006: Marie Curie Fellowship.
2. School and Conference on Analytic Number Theory, April – May 2007, The Abdus Salam International Centre for theoretical Physics, Trieste, Italy.
3. Summer School and Conference on Mathematics, Algorithms and Proofs (ICTP, Trieste, Italy; 11 - 29 August 2008).
4. CANT 2009, University of Liege, Belgique, May 2009: Marie Curie Fellowship.

5. Sage Days 16-Computational Number Theory, June 22-27 , 2009, Barcelona.
6. Advanced School and Workshop on p-adic Analysis and Applications, August – September 2009, The Abdus Salam International Centre for teoretical Physics, Trieste, Italy.
7. Workshop on Computational Number Theory and Arithmetic Geometry, May 17-21, 2010, Leuven, Belgium.
8. The Fifth RISC/ SCIENCE Training School in Symbolic Computation, June 28 – July 9, 2010, Hagenberg, Austria.
9. Regulators III, July 12-22, 2010, Barcelona.
10. S^2AM , Summer School in Algorithmic Mathematics, August 15-21, 2010, Berlin.
11. Research CIMPA school on Number Theory and Algorithms, November 15-26, 2010, Bamako, Mali.
12. School and Conference on Modular Forms and their Applications in Arithmetic, Geometry and Physics, 28 February – 18 March 2011, The Abdus Salam International Centre for teoretical Physics, Trieste, Italy.
13. International Summer School on the Birch and Swinnerton-Dyer Conjecture, June 26- July 3, 2011, Porto Conte Ricerche, Alghero.
14. School and Workshop on Computational Algebra and Number Theory, June 18-29 , 2012, ICTP, Trieste, Italy.
15. Workshop: Arithmetic of Abelian varieties in families, November 12-16, 2012, EPFL, Lausanne, Switzerland.
16. Workshop: Number Theory, Geometry and Cryptography, July 1-5, 2013, University of Warwick.
17. Algorithmic and enumerative combinatorics summer school, August 18-22, 2014, Hagenberg, Austria.
18. Barcelona Number Theory Seminar, Facultat de Matematiques, Universitat de Barcelona, January 26-30, 2015.
19. 29 th Journées Arithmétiques, 6-8 July 2015, Debrecen, Hungary (<http://ja2015.math.unideb.hu/abstracts>).
20. 3rd Algorithmic and enumerative combinatorics summer school, August 1-5, 2016, Hagenberg, Austria.
21. International Colloquium of Algebra, Number Theory, Cryptography and Information Security (ANCI'2016), 11-12 November 2016, Taza, Morocco (<http://anci16.byethost8.com/anci-16/>).
22. Transient Transcendence in Transylvania, Braşov, Romania, May 13–17, 2019 (<https://specfun.inria.fr/bostan/trans19/>).
23. Number Theory Conference 2022 in honour of Professors Kálmán Györy, János Pintz and András Sárközy. 4-8 July 2022, Debrecen, Hungary (<https://ntc2020.math.unideb.hu/>).

ORGANIZED CONFERENCES

1. **International Conference on Mathematics and Computer Science (MACOS 2022)**, September 15-17, 2022, Transilvania University, Braşov, Romania (**member in the Organizing Committee**) (<https://mateinfo.unitbv.ro/ro/admitere/admitere-masterat/524-macos2022-organizing.html>).
2. **Sesiune de Comunicari Matematice**, Ovidius University, December 5, 2020 (**member in the Scientific Committee**) (<https://fmi.univ-ovidius.ro/sesiunea-de-comunicari-matematice-2020/>).
3. **Transient Transcendence in Transylvania**, Braşov, Romania, May 13–17, 2019 (**member in the Local Organizing Committee**) (<https://specfun.inria.fr/bostan/trans19/>).
4. **Sesiune de Comunicari Matematice**, Ovidius University, May 11, 2019 (**member in the Scientific Committee**) (<http://math.univ-ovidius.ro/default.aspx?cat=SCM&item=2019>).
5. **International Conference on Mathematics and Computer Science (MACOS 2018)**, June 14-16 2018, Transilvania University, Braşov, Romania (**member in the Organizing Committee**).
6. **International Colloquium of Algebra, Number Theory, Cryptography and Information Security (ANCI'2016)**, 11-12 November 2016, Taza, Morocco (**member in the International Scientific Committee**) (<http://anci16.byethost8.com/anci-16/>).

7. International Conference on Mathematics and Computer Science (2nd Edition -MACOS 2016), September 8-10 2016, Transilvania University, Braşov, Romania (member in the Organizing Committee).

8. International Conference on Creative Collaboration through Supportive Technologies (ICCCST 2015) ProWeb Workshop, July 24, 2015, Constanta, Romania (member in the Program Committee).

9. Conference in the honor of Professor Ravi P Agarwal, Constanta, 10 July 2015, Ovidius University, Constanta (member in the Organizing Committee).

10. International Conference on Mathematics and Computer Science (MACOS 2014), June 26-28 2014, Transilvania University, Braşov, Romania (member in the Organizing Committee).

11. Workshop on Algebraic and Analytic Number Theory and Their Applications, Constanta, May 23-24, 2013 (<http://math.univ-ovidius.ro/Workshop/2013/Number-Theory/>) (main organizer) (this workshop was supported by [UEFISCDI, by the project PN-II-ID-WE-2012-4-161](http://uefiscdi.gov.ro/userfiles/file/PN%20II_WE%20si%20SSA%202012/WE/REZULTATE%20FINAL%20E/lista%20FINALA%20workshop-uri%20_6%20etapa%20-pana%20pe30%20august%202012.pdf)) (http://uefiscdi.gov.ro/userfiles/file/PN%20II_WE%20si%20SSA%202012/WE/REZULTATE%20FINAL%20E/lista%20FINALA%20workshop-uri%20_6%20etapa%20-pana%20pe30%20august%202012.pdf)

12. A new approach in theoretical and applied methods in algebra and analysis, Constanta, April 04 – 06, 2013 (<http://amaa-2013.wikispaces.com/home/>) (member in the Organizing Committee);

13. Science Days, Constanta, April 01 – 03, 2013 (<http://math.univovidius.ro/Doc/Evenimente/20130401/AnuntSD.pdf>) (member in the Organizing Committee);

14. 3rd International Conference on Environmental and Geological Science and Engineering, 2nd International Conference on Manufacturing Engineering, Quality and Production Systems, 3rd International Conference on Maritime and Naval Science and Engineering, WSEAS, 3-5 September 2010, Constanta, Romania (member in the Secretariat of the Conference).

THE LIST OF THE PUBLISHED WORKS

I. ISI ARTICLES (Web of Science articles)

1. D. Savin, *About a Diophantine Equation*, **An. Şt. University „Ovidius“ of Constanta**, Romania, Ser. Mat., XVII (2009), f.3, p.241-250 (<https://www.anstuomath.ro/volume-xvii-2009-fascicola-3.html>).

2. D. Savin, C. Flaut, C. Ciobanu, *Some properties of the symbol algebras*, **Carpathian Journal of Mathematics** , vol. **25**, No. 2 (2009), p. 239-245 (<https://www.carpathian.cunbm.utcluj.ro/project/vol-25-2009-no-2/>).

3. D. Savin, M.Stefănescu, *A necessary condition for certain Primes to be written in the form $x^q + ry^q$* , **Journal of Algebra and Its Applications (World Scientific)**, vol. **10**, no.3 (June 2011), p. 435-443 (<https://www.worldscientific.com/doi/abs/10.1142/S0219498811004665>).

4.D. Savin, *About some split central simple algebras*, **An. Şt. University „Ovidius“ of Constanta**, Romania, Ser. Mat. **XXII** (2014), f.1, p.263-272 (<https://www.anstuomath.ro/volume-xxii-2014-fascicola-1.html>).

5. C. Flaut, D. Savin, *Some properties of the symbol algebras of degree 3*, **Math. Reports**, vol. **16** (66), no. 3 (2014), 443 – 463 (http://imar.ro/journals/Mathematical_Reports/Mrc14_3.pdf).

6. C. Flaut, D. Savin, *Some examples of division symbol algebras of degree 3 and 5*, **Carpathian Journal of Mathematics**, vol. 31, No. 2 (2015), p. 197-204 (<https://www.carpathian.cunbm.utcluj.ro/project/vol-31-2015-no-2/>).
7. D. Savin, *Some properties of Fibonacci numbers, Fibonacci octonions, and generalized Fibonacci-Lucas octonions*, **Advances in Difference Equations (Springer)** (2015), 2015:298, DOI 10.1186/s13662-015-0627-z x (<https://link.springer.com/article/10.1186/s13662-015-0627-z>).
8. C. Flaut, D. Savin, *Quaternion Algebras and Generalized Fibonacci-Lucas Quaternions*, **Advances in Applied Clifford Algebras (Springer)**, December 2015, Volume 25, Issue 4, pp 853-862 (<https://link.springer.com/article/10.1007/s00006-015-0542-0>).
9. D. Savin, *About division quaternion algebras and division symbol algebras*, **Carpathian Journal of Mathematics**, vol. 32, No. 2 (2016), pp. 233 – 240 240 (<https://www.carpathian.cunbm.utcluj.ro/project/vol-32-2016-no-2/>).
10. D. Savin, *About Special Elements in Quaternion Algebras Over Finite Fields*, **Advances in Applied Clifford Algebras (Springer)**, vol. 27, June 2017, Issue 2 , pp. 1801-1813 (<https://link.springer.com/article/10.1007/s00006-016-0718-2>).
11. D. Savin, *About split quaternion algebras over quadratic fields and symbol algebras of degree n*, **Bull. Math. Soc. Sci. Math. Roumanie**, Tome 60 (108) No. 3, 2017, p. 307- 312 (<https://ssmr.ro/bulletin/volumes/60-3/index.html>).
12. C. Flaut, D. Savin, *Some special number sequences obtained from a difference equation of degree three*, **Chaos, Solitons & Fractals (Science Direct, Elsevier)**, vol. 106, January 2018, p 67-71 (<https://www.sciencedirect.com/science/article/abs/pii/S0960077917304708>).
13. V. Acciario and D. Savin, *Computing normal integral bases of abelian number fields*, **JP Journal of Algebra, Number Theory and Applications**, vol. 40, Issue 6, December 2018, p. 923-943 (<http://www.pphmj.com/abstract/12237.htm>).
14. C. Flaut, D. Savin, *Some remarks regarding (a, b, x_0, x_1) numbers and (a, b, x_0, x_1) quaternions*, **Ars Combinatoria** 2021, vol. 155, p. 27-43 .
15. C. Flaut, D. Savin, *Some remarks regarding l - elements defined in algebras obtained by the Cayley–Dickson process*, **Chaos, Solitons & Fractals (Science Direct, Elsevier)**, vol. 118, January 2019, p 112-116 (<https://www.sciencedirect.com/science/article/abs/pii/S0960077918308294>).
16. S.G. Rayaguru, D. Savin, G.K. Panda, *On Some Horadam Symbol Elements*, **Notes on Number Theory and Discrete Mathematics**, vol. 25, July 2019, no. 2, p. 91—112 (<http://nntdm.net/volume-25-2019/number-2/91-112/>).
17. C. Flaut, D. Savin, G. Zaharia, *Properties and applications of some special integer number sequences*, **Mathematical Methods in the Applied Sciences**, vol. 44, no. 9, p. 7442-7454 (2021),DOI:10.1002/mma.6257 (<https://onlinelibrary.wiley.com/doi/abs/10.1002/mma.6257>).
18. N. Minculete, D. Savin, *Some Properties of Extended Euler's Function and Extended Dedekind's Function*, **Mathematics MDPI** 2020, 8, 1222; doi:10.3390/math8081222, p.1-10, www.mdpi.com/journal/mathematics.
19. C. Flaut, D. Savin, *Some properties of the norm in a division quaternion algebra*, accepted in **Mathematical Methods in the Applied Sciences**, 2021, <https://onlinelibrary.wiley.com/doi/10.1002/mma.7502>
20. N. Minculete, D. Savin, *Some generalizations of the functions τ and $\tau^{(e)}$ in algebraic number fields*, **Expositiones Mathematicae** 2021 (Science Direct, Elsevier), vol 39, p. 344-353. <https://doi.org/10.1016/j.exmath.2020.07.001>, <https://www.sciencedirect.com/science/article/abs/pii/S0723086920300347>.
21. N. Minculete, D. Savin, *Some Properties of Euler's Function and of the Function t and Their Generalizations in Algebraic Number Fields*, **Mathematics MDPI** 2021, 9, 1710, <https://doi.org/10.3390/math9151710>.
22. V. Acciario, D. Savin, M. Taous and A. Zekhnini, *On quaternion algebras over the composite of quadratic number fields*, **Glasnik Matematicki**, vol. 56, no. 1 (2021), p. 63-78 (<https://doi.org/10.3336/gm.56.1.05> https://web.math.pmf.unizg.hr/glasnik/vol_56/no1_05.html).
23. V. Acciario, D. Savin, M. Taous and A. Zekhnini, *On quaternion algebras over some extensions of quadratic number fields*, **Boletín de la Sociedad Matemática Mexicana**, vol. 27, Issue 3, November 2021,

p.1-7(<https://link.springer.com/article/10.1007/s40590-021-00365-9>
<https://doi.org/10.1007/s40590-021-00365-9>).

24. V. Acciario, **D. Savin**, M. Taous and A. Zekhnini, *On quaternion algebras that split over specific quadratic number fields*, **Italian Journal of Pure and Applied Mathematics-N.** 47–2022 (91–107) (https://ijpam.uniud.it/online_issue/202247/07%20Acciario-Savin-Taous-Zekhnini.pdf?fbclid=IwARlwXfhzvHYgTim5F1qLWTopLOWKM4MpEBXw0OPri2UqxETP6SYubeNjSPc)

25. D. Piciu, **D. Savin**, *Residuated Lattices with Noetherian Spectrum*, **Mathematics MDPI 2022**, 10, 1831, <https://doi.org/10.3390/math10111831> (<https://www.mdpi.com/2227-7390/10/11/1831>).

26. **D. Savin**, *Some diagonalizable matrices, connected with difference equations of degree 3*, accepted for publication in **Journal of Discrete Mathematical Sciences & Cryptography**.

II. BDI ARTICLES (articles published in journals indexed in international databases zbMath and/or MathSciNet and/or Scopus)

27. **D. Savin**, *The use some identitys and inequalitys in problems of combinatorial*, **An. St. University „Ovidius“ of Constanta**, Romania, Ser. Mat., 8 (2000), f.1, p.141-145 (https://www.anstuocmath.ro/mathematics/pdf0/2000_v8_f1_new.pdf).

28. **D. Savin**, *On some Diophantine Equations (I)*, **An. Şt. University „Ovidius“ of Constanta**, Romania, Ser. Mat., 10 (2002), f.1., p.121-134 (<https://www.anstuocmath.ro/volume-x-2002-fascicola-1.html>).

29. **D. Savin**, *On some Diophantine Equations (II)*, **An.Şt.University„Ovidius“ of Constanta**, Romania, Ser. Mat., 10 (2002), f.2., p.79 – 86 (<https://www.anstuocmath.ro/volume-x-2002-fascicola-2.html>).

30. **D. Savin**, *Systems of Diophantine equations without solutions*, **Proceedings of the International Symposium of Mathematics and its Applications**, November, 6 – 9, 2003, Timișoara, Romania, p. 310-317, , [MR2433371](https://doi.org/10.1007/978-3-030-12433-7_17).

31. **D.Savin**, *About the systems of Diophantine equations*, **Journal Automation Computers - Applied Mathematics**, vol.13 (2004), Number 1, p.191-196, , [MR2433371](https://doi.org/10.1007/978-3-030-12433-7_17).

32. **D. Savin**, *On some Diophantine Equations (III)*, **An. Şt. University„Ovidius“ of Constanta**, Romania, Ser. Mat., 12 (2004), f.1., p.73 – 80 (<https://www.anstuocmath.ro/volume-xii-2004-fascicola-1.html>).

33. **D. Savin**, *On the Diophantine Equation $x^4 - q^4 = py^3$* , in the special conditions, **An. Şt. University „Ovidius“ of Constanta**, Romania, Ser. Mat. 12 (2004), f.1., p.81-90 (<https://www.anstuocmath.ro/volume-xii-2004-fascicola-1.html>).

34. **D.Savin**, A Bărbulescu, *On the Diophantine Equation $x^4 - q^4 = py^7$* , in special conditions, **Journal Automation Computers - Applied Mathematics**, vol.15 (2006), No 2, p.295-300 (<http://acam.tucn.ro/pdf/ACAM15%282%292006-abstracts.pdf>).

35. **D.Savin**, *Artin Symbol of the Kummer fields*, **Journal Creative Mathematics and Informatics**, vol. 16 (2007), p. 63-69 (<https://www.creative-mathematics.cunbm.utcluj.ro/article/artin-symbol-of-the-kummer-fields/>).

36. **D. Savin**, *Integers Points of Elliptic Curves*, **Seminar Series in Mathematics (Algebra: 5), Proceedings of the 16th National School of Algebra on Elliptic Curves**, 5-12 September 2007, Constanta, Romania, p. 111-122, , [Zbl 1154.00014](https://zbmath.org/journals/SB/1154.00014).

37. **D. Savin**, *Bachet-Mordell's Equations*, **Seminar Series in Mathematics (Algebra: 5), Proceedings of the 16th National School of Algebra on Elliptic Curves**, 5-12 September 2007, Constanta, Romania, p. 101-110, , [Zbl 1154.00014](https://zbmath.org/journals/SB/1154.00014).

38. **D.Savin**, *On the Diophantine Equation $x^4 - q^4 = py^5$* , **Italian Journal of Pure and Applied Mathematics** no.26 (2009), p.103-108 (<http://ijpam.uniud.it/abstracts/abstract%2026-2009.pdf>).

39. **D. Savin**, *Some properties of cyclotomic fields and Kummer fields*, **International Journal of Mathematics and Computation**, vol.6, no. M10 (2010), p.22-26 (<http://www.ceser.in/ceserp/index.php/ijmc/article/view/2444>).

40. **D. Savin**, *On the Diophantine Equation $\frac{x^5 + y^5}{x + y} = 5z^5$* , **Proceedings of the 12th WSEAS Int. Conf. on Mathematical Methods, Computational techniques and intelligent systems (MAMECTIS '10)**, May 3-6, 2010, Sousse, Tunisia (<https://dl.acm.org/doi/proceedings/10.5555/1844499>).
41. **D. Savin**, *About the Diophantine Equation $x^4 - q^4 = py^4$* , **International Journal of Mathematics and Computation**, vol.11, no. J11 (2011), p.21-27 (<http://www.ceser.in/ceserp/index.php/ijmc/article/view/2499>).
42. C. Flaut, **D. Savin**, G. Iorgulescu, *Some properties of Fibonacci and Lucas symbol elements*, **Journal of Mathematical Sciences: Advances and Applications**, vol. 20 (2013), p. 37-43 (http://scientificadvancespublishers.com/tables_contents_sciences_advances_applications.html).
43. **D. Savin**, *Fibonacci primes of special forms*, **Notes on Number Theory and Discrete Mathematics**, vol. 20, 2014, no.2, p. 10-19 (<http://nntdm.net/volume-20-2014/number-2/10-19>).
44. **D. Savin**, C. Flaut, *About quaternion algebras and symbol algebras*, **Bull. Univ. Transilvania Brasov, Seria III**, vol 7(56) (2014), no 2, p. 59-64 (<http://webbut.unitbv.ro/BU2014/Series%20III/BULETIN%20III/8.%20flaut%20savin.pdf>).
45. **D. Savin**, *Quaternion algebras and symbol algebras over algebraic number field K , with the degree $[K:Q]$ even*, **Gulf Journal of Mathematics**, Vol 4, Issue 4 (2016), p. 16-21 (<https://gjom.org/index.php/gjom/issue/view/27>).

h -index: 5 Web of Science; 8 Google scholar; 5 Scopus

III. OTHER ARTICLES (selection)

46. **D. Savin**, E. Savin, *One application of Euler function*, Proceedings of the 3rd annual Conference of Romanian Society of Mathematical Sciences, vol. III, p. 285 – 287, Craiova, Romania, 1999.
47. **D. Savin**, *Applications of Legendre theorem*, Proceedings of the 5th annual Conference of Romanian Society of Mathematical Sciences, vol. II, p. 133 – 135, Brasov, Romania, 2001. .
48. **D. Savin**, *About some Diophantine equations*, Proceedings of the sixth annual Conference of the Romanian Society of Mathematical Sciences, vol. II, p. 183 -192, Sibiu, Romania, 2003.
49. **D. Savin**, *The use the quadratic residues in the solution some Diophantine equations*, Proceedings of the Seminar of Didactica of Mathematics, vol.20, p.121-124, Cluj – Napoca, Romania, 2003.
50. **D. Savin**, A Generalization of Some Result of E. Kiss and J. Sándor, *Octogon Mathematical Magazine*, 15, No.1(2007), 289-290.
51. L.Homentcovschi, **D. Savin**, *The 4th edition of the Contest of the Faculty of Mathematics and Computer Science of Ovidius University Constanta*, *The Mathematical Gazette from Romania, Series. B*, No.1 (2010), p.17-24.

IV. CITATIONS

CITATIONS in ISI journals (selection)

1. D. Savin, *On the Diophantine Equation $x^4 - q^4 = py^3$, in the special conditions*, *Analele Stiintifice ale Universitatii "Ovidius"*, Constanta, Ser. Mat. **12** (2004), f.1., p.81-90 (MR2204094, Zbl. 1134.11320).
Cited in
F. Luca, A. Togbe, *On the Diophantine Equation $x^4 - q^4 = py^3$* , **Rocky Mountain Journal of Mathematics**, vol. 40, no. 3, (2010) 995-1008.
2. D. Savin, *On the Diophantine Equation $x^4 - q^4 = py^5$* , *Italian Journal of Pure and Applied Mathematics* no.26 (2009), p.103-108.

Cited in

A. Bajolet, B. Dupuy, F. Luca, A. Togbe, *On the Diophantine equation $x^4 - q^4 = py^r$* , **Publicationes Mathematicae Debrecen**, 79/3-4 (2011) 269-282.

3. D. Savin, C. Flaut, C. Ciobanu, *Some properties of the symbol algebras*, Carpathian Journal of Mathematics, vol. 25, No. 2 (2009), p. 239-245.

Cited in

M. Jafari, Y. Yayli, *Rotation in four dimensions via Generalized Hamilton operators*

Kuwait Journal of Science, vol 40 (1) June 2013, p.67-79.

4. D. Savin, *About a Diophantine Equation*, An. Şt. University, „Ovidius“ of Constanta, Romania, Ser. Mat., XVII (2009), f.3, p.241-250.

Cited in

R. Keskin, N. Demitürk, *Solutions of Some Diophantine Equations Using Generalized Fibonacci and Lucas Sequences*, **Ars Combinatoria**, Volume CXI, July, 2013, p.161-179.

5. D. Savin, C. Flaut, C. Ciobanu, *Some properties of the symbol algebras*, Carpathian Journal of Mathematics, vol. 25, No. 2 (2009), p. 239-245.

Cited in

M. Akyigit, H. H. Kosal, M. Tosun, *Fibonacci Generalized Quaternions*, **Advances Applied Clifford Algebras**, 24(3), p. 631–641 (2014).

6. D. Savin, *About a Diophantine Equation*, An. Şt. University, „Ovidius“ of Constanta, Romania, Ser. Mat., XVII (2009), f.3, p.241-250.

Cited in

T. Andreescu and D. Andrica, *Equations with Solution in Terms of Fibonacci and Lucas Sequences*, **An. Şt. University, „Ovidius“ of Constanta**, Romania, Ser. Mat., XXII (2014), f.3, p. 5-12.

7. D. Savin, *About some split central simple algebras*, An. Şt. University, „Ovidius“ of Constanta, Romania, Ser. Mat. XXII (2014), f.1, p.263-272.

Cited in

C. Flaut, *Codes over a subset of Octonion Integers*, **Results Math**, November 2015, Volume 68, Issue 3, pp 345-359.

8. A. Barbulescu, D. Savin, *Some congruences of fibonacci and lucas numbers and properties of fibonacci functions*, Recent Researches in Applied Mathematics and Informatics, Proceedings of the 16th International Conference on Applied Mathematics (AMATH'11), Montreux, Switzerland, December 29-31, 2011, p.129-133.

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C. Flaut, *Codes Over Subsets of Algebras Obtained by the Cayley–Dickson Process*, **Advances Applied Clifford Algebras**, 26 (4), p. 1195–1210 (2016).

11. C. Flaut, D. Savin, *Some examples of division symbol algebras of degree 3 and 5*, Carpathian Journal of Mathematics, vol. 31, No. 2 (2015), p. 197-204.

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M. Marin, I. Abbas, *Evolution of solutions for dipolar bodies in thermoelasticity without dissipation*, **An. Şt. University, „Ovidius“ of Constanta**, Romania, Ser. Mat. XXIV (2016), f.1, p.57-82.

12. D. Savin, *Fibonacci primes of special forms*, Notes on Number Theory and Discrete Mathematics, vol. 20, 2014, no.2, p. 10-19.

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13. C. Flaut, D. Savin, *Quaternion Algebras and Generalized Fibonacci-Lucas Quaternions*, *Advances in Applied Clifford Algebras*, December 2015, Volume 25, Issue 4, pp 853-862.
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15. D. Savin, *About a Diophantine Equation*, *An. Şt. University, „Ovidius“ of Constanta, Romania, Ser. Mat., XVII (2009)*, f.3, p.241-250.
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17. D. Savin, *Fibonacci primes of special forms*, *Notes on Number Theory and Discrete Mathematics*, vol. 20, 2014, no.2, p. 10-19.
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 Ciolan, F. Luca, P. Moree, *Counting terms U_n of third order linear recurrences with $U_n = u^2 + nv^2$* , **Journal of the Ramanujan Mathematical Society**, vol 32, Issue: 2, p. 165-183 (2017).
18. C. Flaut, D. Savin, *Some special number sequences obtained from a difference equation of degree three*, *Chaos, Solitons & Fractals*, vol. 106, January 2018, p 67-71.
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19. D. Savin, *About Special Elements in Quaternion Algebras Over Finite Fields*, *Advances in Applied Clifford Algebras*, vol. 27, June 2017, Issue 2 , pp. 1801-1813
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 S. Yamaç Akbiyik, M. Akbiyik, S. Yüce, *On metallic ratio in Z_n* , accepted in **Mathematical Methods in the Applied Sciences**, vol: 42 Issue: 16 Special Issue: SI Pages: 5535-5550 .
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21. D. Savin, *About Special Elements in Quaternion Algebras Over Finite Fields*, *Advances in Applied Clifford Algebras*, vol. 27, June 2017, Issue 2 , pp. 1801-1813
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 Fengjin Miao, Bin Wu, Congcong Peng, Gaoju Ma, and Ting Xue, *Dynamic calibration method of the laser beam for a non-orthogonal shaft laser theodolite measurement system*, **Applied Optics**, Vol. 58, [Issue 33](#), p. 9020-9026, (2019).
22. C. Flaut, D. Savin, *Some remarks regarding l - elements defined in algebras obtained by the Cayley–Dickson process*, **Chaos, Solitons & Fractals (Science Direct, Elsevier)**, vol. 118, January 2019, p 112-116.
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 M Anđelić, Z Du, CM da Fonseca, *A matrix approach to some second-order difference equations with sign-alternating coefficients*, **Journal of Difference Equations and Applications**, Vol. 26, 2020, Issue 2, p. 149-162.
23. S.G. Rayaguru, D. Savin, G.K. Panda, *On Some Horadam Symbol Elements*, **Notes on Number Theory and Discrete Mathematics**, vol. 25, July 2019, no. 2, p. 91—112

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24. D. Savin, *On the Diophantine Equation $x^4 - q^4 = py^5$* , Italian Journal of Pure and Applied Mathematics no.26 (2009), p.103-108.

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M.A.Bennett, *Integers represented by $x^4 - y^4$ revisited*, **Bulletin of the Australian Mathematical Society**, vol. 103 (no. 1), 2021 (<https://journal.austms.org.au/ojs/index.php/Bulletin/article/view/15239>).

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1. C. Flaut, D. Savin, *Quaternion Algebras and Generalized Fibonacci-Lucas Quaternions*, Advances in Applied Clifford Algebras, December 2015, Volume 25, Issue 4, pp 853-862.

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S. Halici, *On Bicomplex Fibonacci Numbers and Their Generalization*, Models and Theories in Social Systems, vol. 179, Springer 2019, pp 509-524.

2. D. Savin, *About division quaternion algebras and division symbol algebras*, Carpathian Journal of Mathematics, vol. 32, No. 2 (2016), pp. 233 - 240 .

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3. D. Savin, *About a Diophantine Equation*, An. Şt. University „Ovidius“ of Constanta, Romania, Ser. Mat., XVII (2009), f.3, p.241-250.

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T. Andreescu, D. Andrica, *Quadratic Diophantine equations*, Springer 2015.

4. D. Savin, *On the Diophantine Equation $x^4 - q^4 = py^3$* , in the special conditions, An. Şt. University „Ovidius“ of Constanta, Romania, Ser. Mat. 12 (2004), f.1., p.81-90.

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T. Andreescu, D. Andrica, *Quadratic Diophantine equations*, Springer 2015.

5. D. Savin, *On some Diophantine Equations (I)*, An. Şt. University „Ovidius“ of Constanta, Romania, Ser. Mat., 10 (2002), f.1., p.121-134.

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T. Andreescu, D. Andrica, *Quadratic Diophantine equations*, Springer 2015.

6. D. Savin, M. Ştefănescu, *Lectures of Arithmetic and Number theory*, Edit. Matrix Rom, 2008 (in Romanian).

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T. Andreescu, D. Andrica, *Quadratic Diophantine equations*, Springer 2015.

V. BOOKS

1. A. Bărbulescu, D. Savin, *234 problems solved of Complex Analysis*, Edit. Sitech, Craiova, 2006, 201 p. (in Romanian).

2. D. Savin, M. Ştefănescu, *Lectures of Arithmetic and Number theory*, Edit. Matrix Rom, 2008, 314 p. (in Romanian).

VI. BOOKS CHAPTERS

1.D. Savin, *Special numbers, special quaternions and special symbol elements*, appeared in the book Models and Theories in Social Systems, vol. 179, Springer 2019, ISBN-978-3-030-00083-7 , p. 417-430.

2..C. Flaut, **D. Savin**, G. Zaharia, Some applications of Fibonacci and Lucas numbers, appeared in the book Algorithms as a Basis of Modern Applied Mathematics, **Springer** 2021, Online ISBN- 978-3-030-61334-1, p. 119-130.

3. **D. Savin**, V. Acciaro, *Some split symbol algebras of prime degrees*, **Proceedings of the Workshop Women In Numbers, Europe III (Research Directions in Number Theory)**, p. 319-328, **Springer**, 2021.

VII. EDITORIAL WORK

1..C. Flaut, D. Savin, M. Banescu, S. Barcanescu, N. C. Bonciocat, I. Cristea, S. Dascalescu, J. Guardia, A. Mouhib, S. Plaksa, J. Sandor, V. Shpakivskyi, D. Stefanescu, E. Zaharescu (editors), **Analele Stiintifice ale Universitatii Ovidius din Constanta, seria Matematica**, **22(1)**, 2014

(<http://www.anstuocmath.ro/volume-xxii-2014-fascicola-1>
http://www.anstuocmath.ro/mathematics/vol22-1/Invited_Eds.pdf).

2. July 2013 – February 15, 2021, I was managing editor at **Analele Stiintifice ale Universitatii Ovidius din Constanta, seria Matematica** (<https://www.anstuocmath.ro/former-editors.html>).

3. Since October 2020, I am editor at the journal **Mathematics and Computer Science** (Science Publishing Group) (<http://www.mathcomputer.org/editorialboard>).

4. Since April 2021, I am managing editor at the journal **Bulletin of the Transilvania University of Braşov, Series III: Mathematics and Computer Science** (https://webbut.unitbv.ro/index.php/Series_III/Editorial_Board).

5. From January 2021 I am (topic) editor at the journal **Mathematics (MDPI)** and guest editor of the special issue "Algebraic, Analytic, and Computational Number Theory and Its Applications" (https://www.mdpi.com/journal/mathematics/special_issues/algebraic_analytic_computational_number_theory)

VIII. CONFERENCES, SCIENTIFIC SEMINARS, SUMMER SCHOOLS

1. The 3rd annual Conference of Romanian Society of Mathematical Sciences, Craiova, Romania, 1999, with a talk.

2. The 4th annual Conference of Romanian Society of Mathematical Sciences, Constanţa, Romania, 2000, with a talk..

3. The 5th annual Conference of Romanian Society of Mathematical Sciences, Brasov, Romania, 2001, with a talk..

4. The Seminar of Didactica of Mathematics, Cluj – Napoca, Romania, 2002, with a talk..

5. The 6th annual Conference of Romanian Society of Mathematical Sciences, Sibiu, Romania, 2002, with a talk..

6. National School of Algebra (the 10th edition), Eforie Nord, Romania, June 2002

7. National School of Algebra (the 11th edition), Eforie Nord, Romania, September 2002.

8. The Seminar of Didactica of Mathematics, Cluj – Napoca, Romania, 2003, with a talk..

9. The 7th annual Conference of Romanian Society of Mathematical Sciences, Bistriţa, Romania, 2003, with a talk..

10. The 10th International Symposium of Mathematics and its Applications, Novembre 2003, Timişoara, Romania, with a talk.

11. The Seminar of Didactica of Mathematics, Cluj – Napoca, Romania, 2004, with a talk..

12. The Ninth International Conference on Applied Mathematics, Computers Science and Mechanics, May 2004, Cluj – Napoca / Băişoara, Romania, with a talk.

13. Summer School „Hyperplane Arrangements and Constructible Sheaves“, Constanţa, Romania, August 2005.

14. The 17th Czech and Slovak Conference on Number Theory, Malenovice, Czech Republic, September 2005, with a talk..
15. The Tenth International Conference on Applied Mathematics, Computers Science and Mechanics, May 2006, Cluj – Napoca / Băișoara, Romania, with a talk..
16. CANT 2006: International School and Conference on Combinatorics, Automata and Number Theory, Liege, Belgique, May 2006, with a talk.
17. Summer School on Cryptography, Vatra Dornei, Romania, August 2006.
18. The 5th International Conference on Applied Mathematics, September 2006, Baia Mare, Romania, with a talk..
19. National School of Algebra (the 15th edition), Constanta, Romania, September 2006.
20. Commutative algebra and related topics, Constanta, Romania, March, 2007.
21. School and Conference on Analytic Number Theory, 23 April – 11 May 2007, Trieste, Italy (The Abdus Salam International Centre for theoretical Physics), http://math.ictp.it/math/Activity_Single?id=a06193.
22. The 18th Czech and Slovak Conference on Number Theory, Smolenice, Slovakia, August 2007, with a talk.
23. National School of Algebra (the 16th edition), Constanta, Romania, September 2007, with two talks.
24. Course "Iwasawa Theory for Elliptic Curves", May 19th to 23rd, 2008, Facultat de Matematiques i Estadistica of the Universitat Politecnica de Catalunya in Barcelona, Spain.
25. Summer School and Conference on Mathematics, Algorithms and Proofs (ICTP, Trieste, Italy; 11 - 29 August 2008).
26. The 10th International Conference of Tensor Society on Differential Geometry and Its Applications and Mathematical Foundations of Information Sciences and Its Applications, Constanta, Romania, September 3-7, 2008, with a talk.
27. Winter School on Explicit Methods in Number Theory, January 26-30, Institute of Mathematics, University of Debrecen.
28. Sage Days 16-Computational Number Theory, June 22-27, 2009, Barcelona.
29. Advanced School and Workshop on p-adic Analysis and Applications, August – September 2009, The Abdus Salam International Centre for theoretical Physics, Trieste, Italy.
30. The 12th WSEAS Int. Conf. on Mathematical Methods, Computational Techniques and Intelligent systems (MAMECTIS '10), May 3-6, 2010, Sousse, Tunisia, with a talk.
31. Workshop on Computational Number Theory and Arithmetic Geometry, May 17-21, 2010, Leuven, Belgium.
32. The Fifth RISC/ SCIENCE Training School in Symbolic Computation, June 28 – July 9, 2010, Hagenberg, Austria.
33. The 6th International Conference: Dynamical System and Applications, July 10-14, 2010, Antalya, Turkey, with a talk.
34. Regulators III, July 14-22, 2010, Barcelona.
35. S²AM, Summer School in Algorithmic Mathematics, August 15-21, 2010, Berlin.
36. Research CIMPA school on Number Theory and Algorithms, November 15-26, 2010, Bamako, Mali.
37. School and Conference on Modular Forms and their Applications in Arithmetic, Geometry and Physics, 28 February – 18 March 2011, Trieste, Italy.
38. International Summer School on the Birch and Swinnerton-Dyer Conjecture, June 26- July 3, 2011, Porto Conte Ricerche, Alghero.
39. The 16th WSEAS International Conference on Applied Mathematics (AMATH'11), Montreux, Switzerland, December 29-31, 2011, with a talk.
40. Barcelona Number Theory Seminar, Facultat de Matematiques, Universitat de Barcelona, (<http://atlas.mat.ub.es/personals/crespo/STNB2012/stnb2012.pdf>), January 23-27, 2012, with a talk.
41. School and Workshop on Computational Algebra and Number Theory, June 18-29, 2012, ICTP, Trieste, Italy.
42. Workshop: Arithmetic of Abelian varieties in families, November 12-16, 2012, EPFL, Lausanne, Switzerland.
43. A new approach in theoretical and applied methods in algebra and analysis, Constanta, April 04 – 06, 2013, Ovidius University, Constanta, with a paper.
44. Workshop on Algebraic and Analytic Number Theory and Their Applications, Constanta, May 23-24, 2013, Ovidius University, Constanta, with a paper.

45. Workshop: Number Theory, Geometry and Cryptography, July 1-5, 2013, University of Warwick.
46. Frobenius distributions on curves, 24-28 February 2014, CIRM workshop (Marseille, France).
47. International Conference on Mathematics and Computer Science (MACOS 2014), June 26-28 2014, Braşov, Romania, with a talk.
48. Algorithmic and enumerative combinatorics summer school, August 18-22, 2014, Hagenberg, Austria.
49. Barcelona Number Theory Seminar, Facultat de Matemàtiques, Universitat de Barcelona, January 26-30, 2015.
50. 29 th Journées Arithmétiques, 6-8 July 2015, Debrecen, Hungary, with a talk.
51. Conference in the honor of Professor Ravi P. Agarwal, Constanta, 10 July 2015, Ovidius University, Constanta.
52. International Conference on Creative Collaboration through Supportive Technologies (ICCCST 2015) ProWeb Workshop, July 24, 2015, Ovidius University, Constanta, Romania.
53. 3rd Algorithmic and enumerative combinatorics summer school, August 1-5, 2016, Hagenberg, Austria.
54. International Conference on Mathematics and Computer Science (2nd Edition -MACOS 2016), September 8-10 2016, Transilvania University, Braşov, Romania, with a talk.
55. International Colloquium of Algebra, Number Theory, Cryptography and Information Security (ANCI'2016), 11-12 November 2016, Taza, Morocco, with a talk (keynote speaker) (<http://anci16.byethost8.com/anci-16/>).
56. Scientific Seminar, Università degli Studi "G. D'Annunzio" Chieti-Pescara, Dipartimento di Economia, 17-18 July 2017, Pescara, Italy, with 2 talks (https://www.dec.unich.it/documenti/_0_uda/_1_dec/seminario%20acciaro.pdf).
57. International Conference on Mathematics and Computer Science (MACOS 2018), June 14-16 2018, Braşov, Romania, with a talk.
58. Transient Transcendence in Transylvania, Braşov, Romania, May 13–17, 2019 (<https://specfun.inria.fr/bostan/trans19/>).
59. Number Theory Conference 2022 in honour of Professors Kálmán Györy, János Pintz and András Sárközy 4-8 July 2022, Debrecen, Hungary, with a talk (<https://ntc2020.math.unideb.hu/>).
60. International Conference on Mathematics and Computer Science (MACOS 2022), September 15-17, 2022, Transilvania University, Braşov, Romania, with a talk (<https://mateinfo.unitbv.ro/ro/admitere/admitere-masterat/524-macos2022-organizing.html>).

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