

CURRICULUM VITAE*Taras Goy*

PERSONAL INFORMATION	
Date of birth:	December 24, 1969
Address:	Faculty of Mathematics and Computer Sciences, Department of Differential Equations and Applied Mathematics, Vasyl Stefanyk Precarpathian National University, 57 Shevchenko st., Ivano-Frankivsk, Ukraine, 76018; e-mail: taras.goy@pnu.edu.ua
EDUCATION	
1986 – 1993	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Physics, <i>student</i>
1993 – 1996	Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Department of Mathematical Physics, <i>post-graduate student</i>
1998	Yu. Fedkovych Chernivtsi State University, <i>PhD degree</i>
2018 – 2020	Title of PhD thesis: Nonlocal value-boundary problems for partial differential equations. Thesis Advisor: Prof. Bohdan Ptashnyk Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences, <i>DrSci student</i>
RESEARCH INTERESTS	
2020 MS Classification:	11B37 Recurrences; 11B39 Fibonacci and Lucas numbers and polynomials and generalizations; 11B65 Binomial coefficients; factorials; q -identities; 11B83 Special sequences and polynomials; 11C20 Matrices, determinants in number theory; 15A15 Determinants, permanents, traces, other special matrix functions; 15B05 Toeplitz, Cauchy, and related matrices; 15B36 Matrices of integers; 05A10 Factorials, binomial coefficients, combinatorial functions; 05A15 Exact enumeration problems, generating functions; 11B68 Bernoulli and Euler numbers and polynomials; 40A05 Convergence and divergence of series and sequences.
PROFESSIONAL EXPERIENCE	
Academic Positions:	
1995 – 1996	Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Department of Mathematical Physics (L'viv, Ukraine), mathematician
1996 – 2000	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences (Ivano-Frankivsk, Ukraine), assistant
2002 – till now	Vasyl Stefanyk Precarpathian National University, Faculty of Mathematics and Computer Sciences (Ivano-Frankivsk, Ukraine), associate professor
SCIENTIFIC IDENTIFIATORS	
Web of Science ResearcherID:	A-9770-2016
Scopus Author ID:	57944314900
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SciProfiles:	1901738
arXiv:	https://arxiv.org/a/goy_t_1.html
ResearchGate:	https://www.researchgate.net/profile/Taras-Goy

SELECTED INTERNATIONAL CONFERENCES (2020–2024)	
March 12–13, 2020	Int. Sci. Conf. “Modern Problems of Differential Equations and Related Branches of Mathematics” (Uzbekistan)
October 26–30, 2020	XI Int. Skorobohatko Math. Conf. (Ukraine)
November 22–25, 2021	XIII Belarusian Math. Conf. (Belarus)
May 12–15, 2022	Int. Conf. “Current Trends in Abstract and Applied Analysis” (Ukraine)
May 25–26, 2023	IV Int. Internet Conf. “Mathematics and Informatics in Science and Education: Challenges of Modernity” (Ukraine)
May 23–25, 2023	Int. Sci. Conf. “Current Problems of Mechanics and Mathematics” (Ukraine)
July 18, 2023	Int. Workshop on Current Trends in Analysis and Approximation Theory (Italy)
August 26–28, 2023	XXIII Int. Pure Mathematics Conf. on Algebra, Analysis and Geometry (Pakistan)
September 4–9, 2023	XIII Int. Conf. of the Georgian Mathematical Union (Georgia)
September 28–30, 2023	Int. Conf. “Mathematics and Information Technologies” (Ukraine)
October 11–12, 2023	XIX Int. Sci. M. Kravchuk Conference (Ukraine)
May 27–30, 2024	Int. Sci. Conf. «Algebraic and Geometric Methods of Analysis» (Ukraine)
June 20–22, 2024	Int. Conf. on Modern Problems of Mathematics, Mechanics and their Applications (Azerbaijan)
July 3–6, 2024	XI Int. Sci. Conf. “Modern Problems of Mathematics and Mechanics” (Azerbaijan)
July 9–11, 2024	VIII Int. Conf. on Mathematics: An Istanbul Meeting for World Mathematicians (Turkey)
September 2–7, 2024	XIV Int. Conf. of the Georgian Mathematical Union (Georgia)
September 2–5, 2024	III Int. Symposium on Current Developments in Fundamental and Applied Mathematics Sciences (Turkey)
September 17–18, 2024	IV Int. Conf. on Applied Algebra ICAA'2024 (Algeria)

MEMBERSHIP

Editorial Board Membership: *Carpathian Mathematical Publications*; *Notes on Number Theory and Discrete Mathematics*; *JP Journal of Algebra, Number Theory and Applications*; *European Journal of Mathematics and Statistics*.

Guest Editor of Special Issue “Advanced Studies in Contemporary Mathematics” (*Axioms*, 2022).

Member of Scientific Board of *International Symposium on Current Developments in Fundamental and Applied Mathematics Sciences* (Turkey, 2023, 2024).

Reviewer of *Mathematical Reviews* (American Mathematical Society).

Reviewer in more than 40 journals, including: *AIMS Mathematics*; *Annales Mathematicae Silesianae*; *Applicable Analysis and Discrete Mathematics*; *Applied Mathematics E-Notes*; *Applied Sciences*; *Ars Combinatoria*; *Axioms*; *Bulletin of the Malaysian Mathematical Sciences Society*; *Carpathian Mathematical Publications*; *Communications of the Korean Mathematical Society*; *Discrete Dynamics in Nature and Society*; *Electronic Research Archive*; *Filomat*; *Integers*; *Indian Journal of Pure and Applied Mathematics*; *International Journal of Mathematics and Mathematical Sciences*; *Journal of Applied Mathematics*; *Journal of Inequalities and Applications*; *Journal of Mathematics*; *JP Journal of Algebra, Number Theory and Applications*; *Malaysian Journal of Mathematical Sciences*; *Matematychni Studii*; *Mathematical Problems of Engineering*; *Mathematics*; *Mathematics and Statistics*; *Notes on Number Theory and Discrete Mathematics*; *Online Journal of Analytic Combinatorics*; *Operators and Matrices*; *Palestine Journal of Mathematics*; *Punjab University Journal of Mathematics*; *Real Analysis Exchange*, *Research in Mathematics*; *Symmetry*; *Quaestiones Mathematicae*; *Thai Journal of Mathematics*; *Transactions on Combinatorics*; *Turkish Journal of Mathematics*; *Ukrainian Mathematical Journal*.

LIST OF SELECTED PUBLICATIONS

1. Adegoke K., Frontczak R., Goy T. Fibonacci sums modulo 5, *Ann. Math. Sil.* (2025), 39(1), to accept.
2. Adegoke K., Frontczak R., Goy T. Some notes on a Fibonacci–Lucas identity, *Proc. Jangjeon Math. Soc.* (2024), 27(4), to accept.
3. Goy T., Shattuck M. Toeplitz-Hessenberg determinant formulas for the sequence $F_n - 1$, *Online J. Anal. Comb.* (2024), 19, to accept.
4. Adegoke K., Frontczak R., Goy T. On some series involving the binomial coefficients $\binom{3n}{n}$, *Notes Number Theory Discrete Math.* (2024), 30(2), 319–334.
5. Goy T., Shattuck M. Determinants of Toeplitz-Hessenberg matrices with generalized Leonardo numbers entries, *Ann. Math. Sil.* (2024), 38(2), 284–313.
6. Adegoke K., Frontczak R., Goy T. The integrals in Gradshteyn and Ryzhik. Part 1: An Addendum, *Sci. Ser. A Math. Sci. (N.S.)* (2024), 34, 27–37.
7. Goy T., Shattuck M. Determinant identities for the Catalan, Motzkin and Schröder number. *Art Discrete Appl. Math.* (2024), 7(1), #P1.09.
8. Adegoke K., Frontczak R., Goy T. New binomial Fibonacci sums, *Palest. J. Math.* (2024), 13(1), 323–339.
9. Adegoke K., Frontczak R., Goy T. Binomial sum relations involving Fibonacci and Lucas numbers, *AppliedMath.* (2023), 3(4), 851–881.
10. Adegoke K., Frontczak R., Goy T. Binomial Fibonacci sums from Chebyshev polynomials, *J. Integer Seq.* (2023), 26, Article 23.9.6.
11. Goy T., Shattuck M. Hessenberg–Toeplitz matrix determinants with Schröder and Fine entries. *Carpathian Math. Publ.* (2023), 15(2), 420–436.
12. Goy T., Shattuck M. Determinants of Some Hessenberg–Toeplitz matrices with Motzkin number entries. *J. Integer Seq.* (2023), 26, Article 23.3.4.
13. Adegoke K., Frontczak R., Goy T. Reciprocal series involving Horadam numbers, *Ukrainian Math. J.* (2023), 75(3), 335–346.
14. Adegoke K., Frontczak R., Goy T. Additional Fibonacci–Bernoulli relations, *Res. Math.* (2022), 30(2), 3–17.
15. Adegoke K., Frontczak R., Goy T. Fibonacci–Catalan series. *Integers* (2022), 22, #110.
16. Adegoke K., Frontczak R., Goy T. Recurrence relations for the squares the Horadam numbers and some associated consequences, *Tatra Mt. Math. Publ.* (2022), 82 (2), 17–28.
17. Adegoke K., Frontczak R., Goy T. On a family of infinite series with reciprocal Catalan numbers, *Axioms* (2022), 11(4), 165.
18. Frontczak R., Goy T., Shattuck M. Fibonacci–Lucas–Pell–Jacobsthal relations. *Ann. Math. Inform.* (2022), 54, 28–48.
19. Frontczak R., Goy T., Shattuck M. Identities relating six members of the Fibonacci family of sequences. *Carpathian Math. Publ.* (2022), 14(1), 6–19.
20. Adegoke K., Frontczak R., Goy T. Some special sums with squared Horadam numbers with and generalized tribonacci numbers, *Palest. J. Math.* (2022), 11(1), 66–73.
21. Adegoke K., Frontczak R., Goy T. Binomial tribonacci sums, *Discrete Math. Lett.* (2022), 8(1), 30–37.
22. Frontczak R., Goy T. Chebyshev–Fibonacci polynomial relations using generating functions. *Integers* (2021), 21, #A100.
23. Frontczak R., Goy T. More Fibonacci–Bernoulli relations with and without balancing polynomials. *Math. Commun.* (2021), 26(2), 215–226.
24. Frontczak R., Goy T. Additional close links between balancing and Lucas-balancing polynomials, *Adv. Stud. Contemp. Math.* (2021), 31(2), 287–300.
25. Adegoke K., Frontczak R., Goy T. Special formulas involving polygonal numbers and Horadam numbers. *Carpathian Math. Publ.* (2021), 27(1), 207–216.
26. Frontczak R., Goy T. Lucas–Euler relations using balancing and Lucas-balancing polynomials, *Kyungpook Math. J.* (2021), 61(3), 473–486.

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27. Frontczak R., Goy T. General infinite series evaluations involving Fibonacci numbers and the Riemann zeta function. *Mat. Stud.* (2021), 55(2), 115–123.
 28. Goy T., Shattuck M. Determinant formulas of some Hessenberg matrices with Jacobsthal entries. *Appl. Appl. Math.* (2021), 16(1), 191–213.
 29. Adegoke K., Frontczak R., Goy T. Partial sum of the products of the Horadam numbers with subscripts in arithmetic progression. *Notes Number Theory Discrete Math.* (2021), 27(2), 54–63.
 30. Frontczak R., Goy T. Combinatorial sums associated with balancing and Lucas-balancing polynomials, *Ann. Math. Inform.* (2020), 52, 97–105.
 31. Goy T. Combinatorial properties of Boubaker polynomials, *Math. Probl. Eng.* (2020), 2020, Article ID 1528639.
 32. Goy T., Shattuck M. Some Toeplitz–Hessenberg determinant identities for the tetranacci numbers, *J. Integer Seq.* (2020), 23(6), Article 20.6.8.
 33. Goy T., Shattuck M. Determinant identities for Toeplitz–Hessenberg matrices with tribonacci number entries, *Trans. Comb.* (2020), 9(2), 89–109.
 34. Goy T., Zatorsky R. Hessenberg Matrices: Properties and Some Applications. In: *Hot Topics in Linear Algebra*, edited by I. Kyrchei, Nova Science Publ., New York, 2020, P. 163–204.
 35. Goy T., Shattuck M. Fibonacci–Lucas identities and the generalized Trudi formula, *Notes Number Theory Discrete Math.* (2020), 26(3), 203–217.
 36. Frontczak R., Goy T. Mersenne–Horadam identities using generating functions, *Carpathian Math. Publ.* (2020), 12(1), 34–45.
 37. Goy T., Sharyn S. On Pell–Padovan numbers and their connection on Fibonacci numbers, *Carpathian Math. Publ.* (2020), 12(2), 280–288.
 38. Goy T., Shattuck M. Determinant formulas of some Toeplitz–Hessenberg matrices with Catalan entries, *Proc. Indian Acad. Sci. Math. Sci.* (2019), 129, Article 46.
 39. Goy T., Zatorsky R. On Oresme numbers and their connection with Fibonacci and Pell numbers, *Fibonacci Quart.* (2019), 57(3), 238–245.
 40. Goy T. Pell numbers identities from Toeplitz–Hessenberg determinants and permanents, *Novi Sad J. Math.* (2019), 49(2), 87–94.
 41. Goy T., Shattuck M. Determinants of Toeplitz–Hessenberg matrices with generalized Fibonacci entries, *Notes Number Theory Discrete Math.* (2019), 25(4), 83–95.
 42. Goy T., Shattuck M. Fibonacci and Lucas identities using Toeplitz–Hessenberg matrices, *Appl. Appl. Math.* (2019), 14(2), 699–715.
 43. Goy T. On identities with multinomial coefficients for Fibonacci–Narayana sequence, *Ann. Math. Inform.* (2018), 49, 75–84.
 44. Goy T. Horadam sequence through recurrent determinants of tridiagonal matrix, *Kragujevac J. Math.* (2018), 42(4), 527–532.
 45. Goy T. On new identities for Mersenne numbers, *Appl. Math. E-Notes* (2018), 18, 100–105.
 46. Goy T. Fibonacci and Lucas numbers via the determinants of tridiagonal matrix, *Notes Number Theory Discrete Math.* (2018), 24(1), 103–108.
 47. Goy T. Some families of identities for Padovan numbers, *Proc. Jangjeon Math. Soc.* (2018), 21(3), 413–419.
 48. Goy T.P. On some fibinomial identities, *Chebyshevskii Sb.* (2018), 19(2), 56–66.
 49. Goy T. On determinants and permanents of some Toeplitz–Hessenberg matrices whose entries are Jacobsthal numbers, *Eurasian Math. J.* (2018), 9(4), 61–67.
 50. Goy T., Zatorsky R. Infinite linear recurrence relation and superposition of linear recurrence equations, *J. Integer Seq.* (2017), 20(5), Article 17.5.3.
 51. Zatorsky R.A., Goy T.P. Parapermanents of triangular matrices and some general theorems on number sequences, *J. Integer Seq.* (2016), 19(2), Article 16.2.20.
 52. Goy T.P., Zatorsky R.A. New integral functions generated by rising factorial powers, *Carpathian Math. Publ.* (2013), 5(2), 217–224.