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EDUCATION

- Université Laval, Québec, Canada, *Ph.D. in Mathematics (**Number Theory**)*, 1997.
  Advisor: Prof. Claude Levesque
    Title: ***On the solutions of families of Diophantine equations***
- Université Laval, Québec, Canada, *MS in Mathematics (**Number Theory**)*, 1994.
  Advisor: Prof. Claude Levesque
    Title: ***On quadratic forms***
- Université d'Abidjan, Cote d'Ivoire, *DEA in Mathematics (**Differential Geometry**)*, 1988.
  Advisor: Prof. Ba Boubacar
    Title: ***On linear connections***
- Université Nationale du Benin, *Teaching Certificate*, 1985.
- Université Nationale du Benin, *BS in Mathematics*, 1984.

EXPERIENCE

2010-Present: *Professor of Mathematics*, Purdue University Northwest, Westville, IN USA
2006-2010: *Associate Professor of Mathematics*, Purdue University North Central, Westville, IN USA
2003-2006: *Assistant Professor of Mathematics,* Purdue University North Central, Westville, IN USA.
1999-2003: *Assistant Professor of Mathematics*, Greenville College, Greenville, IL USA.
1999-1999: *Mathematics Instructor of Mathematics*, Babson College, Wellesley, MA USA.
1992-1997: *Teaching and Research Assistant*, Laval University, Canada.
1985-1992: *Mathematics teacher*, High school of Beoumi, Ivory Coast.
1983-1985: *Mathematics teacher* (part-time), High school of Segbeya, Cotonou, Benin.

PUBLICATIONS

1. (with B. Kafle, A. Srinivasan), ***Markoff Equation with Pell components***. Accepted to appear in The Fibonacci Quarterly.
2. (with A. Noubissie), *A note on the Exponential Diophantine Equation $(a^n-1)(b^n-1)=x^2$.* Accepted to appear in Annales Mathematicae et Informaticae.
3. (with S. Rihane, B. Faye, F. Luca), ***Powers two in Generalized Lucas sequences.*** Accepted to appear in The Fibonacci Quarterly.
4. (with A. Noubissie, Z. Zhang), ***On the Exponential Diophantine Equation $(a^n-1)(b^n-1)=x^2$.*** Accepted to appear in the Bulletin of the Belgian Mathematical Society – Simon Stevin.
5. (with C. Adegbindin), ***Can a Lucas number be a sum of three repdigits?*** Accepted to appear in the Commentationes Mathematicae Universitatis Carolinae.
6. (with S. Rihane, B. Faye, F. Luca), ***An exponential Diophantine equation related to the difference between powers of two consecutive Balancing numbers.*** Accepted to appear in Annales Mathematicae et Informaticae.
7. (with Eric Bravo, Carlos Gomez, Bir Kafle, F. Luca), ***On a conjecture concerning the multiplicity of the Tribonacci sequence***. Accepted to appear in Colloquium Mathematicum.
8. (with F. Luca, V. Togan), ***On the X-coordinates of Pell equations which are rep-digits, II***. Accepted to appear in Annales Mathematicae et Informaticae.

9. (with C. Adegbindin, F. Luca), *Pell and Pell-Lucas numbers as sums of two repdigits.* Accepted to appear in Bulletin of the Malaysian Mathematical Sciences Society.

10. (with B. Kafle, F. Luca), *Lucas Factoriangular numbers*. Accepted to appear in Mathematica Bohemica.

11. (with B. V. Normenyo, B. Kafle), *Repdigits as sums of two Fibonacci numbers and two Lucas numbers*. Integers Journal 19 (2019), #55.

12. (with B. Kafle, F. Luca), *x-coordinates of Pell equations which are Lucas numbers*. Boletín de la Sociedad Matemática Mexicana (2019) 25:481–493.

13. (with B. Kafle, F. Luca), *x-coordinates of Pell equations which are Tribonacci numbers II*. Periodica Mathematica Hungarica (2019) 79:157–167.

14. (with C. Adegbindin, F. Luca), *Lucas numbers as sums of two repdigits.* Lithuanian Mathematical Journal, Vol. 59, No. 3, July 2019, pp. 295–304.

15. (with S. Rihane, B. Faye, F. Luca), *On the exponential equation $P_n^x + P_{n+1}^x = P_m$.* Turk J Math, 43, (2019), 1640-1649.

16. (with B. Kafle, F. Luca, A. Montejano, L. Szalay), *On the X-coordinates of Pell equations which are products of two Fibonacci numbers*. Journal of Number Theory, **203** (2019), 347-387.

17. (with Y. Bilu, M. Diego), *Generalized Cullen Numbers in Linear Recurrence Sequences*. Journal of Number Theory, **202** (2019), 412-425.

18. (with B. He, J. Odjoumani), *On a class of quartic Thue equations with three parameters*, Journal of Number Theory, **202** (2019), 310-333.

19. (with B. V. Normenyo, F. Luca), *Repdigits as sums of four Pell numbers*. Boletín de la Sociedad Matemática Mexicana (2019) 25, 249–266.

20. (with S. Yang, F. Luca), *On a Divisibility Problem*. Mathematica Bohemica 144 (2) (2019), 125-135.

21. (with F. Luca, J. Odjoumani), *Pell Factoriangular numbers*. Publ. Inst. Math. Beograd. Nouvelle série, tome 105(119) (2019), 93–100.

22. (with S. Rihane, M. Hernane), *On Diophantine triples of Pell numbers*. Colloquium Mathematicum 156 (2019). 273-285.

23. (with B. Normenyo, F. Luca) *Repdigits as sums of three Lucas number*. Colloquium Mathematicum 156 (2019). 255-285.

24. (with B. He, V. Ziegler), *There is no Diophantine Quintuple*. Transactions of the American Mathematical Society, Volume 371, Number 9, May 2019, Pages 6665–6709.

25. (with S. Subburam), *On the Diophantine equation $y^n= f(x)/g(x)$*. Acta Mathematica Hungarica, 157(1), (2019) 1-9.

26. (with J. Odjoumani, V. Ziegler), *On a family of biquadratic fields that do not admit a unit power integral basis*. Publicationes Mathematicae Debrecen, 2019 / 94 / 1-2 (1).

27. (with Z. Zhang), *Perfect Powers that are sums of two powers of Fibonacci numbers*. The Bulletin of the Australian Mathematical Society, Volume 99, Issue 1 February 2019, pp. 34-41.

28. (with S. Rihane, M. Hernane), *The x-coordinates of Pell equations and Padovan numbers.* Turk J Math, 43, (2019), 207-223.

29. (with B. He, K. Pu, R. Shen), *A note on the regularity of the Diophantine pair {k, 4k± 4}*. Journal de Théorie des Nombres de Bordeaux 30 no. 3 (2018), p. 879-892.

30. (with B. Kafle, F. Luca), *Triangular repblocks*. The Fibonacci Quarterly 56 (2018), no. 4, 325–328.

31. (with S. Rihane, M. Hernane, F. Luca), *On Pillai's problem with Pell numbers and powers of 2.* Hardy-Ramanujan Journal 41 (2018), 8-17.

32. (with Z. Zhang), *On the Ramanujan-Nagell type Diophantine equations $x^2 + Ak^n =B$ II*. Glas. Mat. Ser. II, Vol. 53 No 2, (2018) 221-228.

33. (with B. V. Normenyo, F. Luca), *Repdigits as sums of four Fibonacci or Lucas numbers*. Journal of Integer Sequences, Vol. 21 (2018), Article 18.7.7.

34. (with B. Normenyo, F. Luca), *Repdigits as sums of three Pell numbers.* Periodica Mathematica Hungarica, December 2018, Volume 77, Issue 2, pp 318–328.

35. (with N. Irmak), *On repdigits as product of consecutive Lucas Numbers*. The Notes on Number Theory and Discrete Mathematics, Vol. 24, 2018, No. 3, 95–102.

36. (with Z. Zhang), *On the Ramanujan-Nagell type Diophantine equations $x^2 + Ak^n =B$*. Glas. Mat. Ser. II, Vol. 53 No 1, (2018) 43-50.

37. (with S. E. Rihane, M. O. Hernane), *On D(4)-Diophantine triples of Fibonacci numbers*. The Fibonacci

Quarterly, 56 (2018), no. 1, 63-74.

38. (with F. Luca), ***On the x-coordinates of Pell equations which are Fibonacci numbers***. Mathematica Scandinavica, Vol. 122, No. 1 (2018) 18-30.

39. (with B. He, A. Pinter, S. Yang), ***Another generalization of a theorem of Baker and Davenport***. J. Number Theory **182** (2018), 325-343.

40. (with A. Bayad, A. Dossavi-Yovo, A. Filipin), ***On the extensibility of the D(4)-triple {k-2, k+2, 4k} over Gaussian integers***. *Notes on Number Theory and Discrete Mathematics,* Vol. 23, 2017, No. 3, 1–26.

41. (with L. Tan, V. Vijayarajan, N. Chimitt, J. Jiang), ***Channel sparsity-aware recursive least squares algorithms for nonlinear system modeling and active noise control***. 2017 IEEE Ubiquitous Computing, Electronics and Mobile Communications (UEMCON 2017), pp. 225-231, Columbia University, New York City, NY, October 2017.

42. (with F. Luca, A. Montejano, L. Szalay), ***On the X-coordinates of Pell equations which are Tribonacci numbers***. Acta Arithmetica, 179.1 (2017), 25-35.

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44. (with G. Soydan, M. Demirci, I. Cangul), ***On the conjecture of Jesmanowicz***. Int. J. Appl. Math. Stat., Vol. 56, Issue No. 6, Year 2017.

45. (with A. Dossavi-Yovo, B. He), ***The extensibility of the D($\pm$k)-triple {k$\pm$1,k, 4k$\pm$1}***. Afrika Matematika Volume 28, Issue 3-4, June 2017, 563-574.

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53. (with T. Miyazaki, P. Yuan), ***On the Diophantine equation $a^x + b^y = (a+2)^z$***. Acta Mathematica Hungarica, Volume 149, Issue 1, June 2016, 1-9.

54. (with A. Bayad, A. Filipin), ***Extension of a parametric family of Diophantine triples in Gaussian integers***. Acta Math. Hungar, Volume 148, Issue 2, April 2016, pp 312–327.

55. (with S. Subburam), ***On Erdos-Straus Conjecture***. Period Math Hung, March 2016, Volume 72, Issue 1, pp 43–49.

56. (with A. Dossavi-Yovo, F. Luca), ***On the x-coordinates of Pell equations which are rep-digits***. Publicationes Mathematicae Debrecen, 2016 / 88 / 3-4 (9).

57. (with B. He, F. Luca), ***Diophantine triples of Fibonacci***. Acta Arithmetica 175 (2016), 57-70.

58. (with L. Jones, D. Marques), ***On terms of Lucas sequences with only one distinct digit***. Indian Journal of Mathematics, Volume 57, No. 2, 2015, 151-164.

59. (with B. He, A. Pinter), ***On simultaneous Pell equations and related Thue equations***. Proc. Amer. Math. Soc. **143**(2015), 4685-4693.

60. (With H. Zhu, M. Le, G. Soydan), ***On the exponential Diophantine equation $x^2 + 2^a\ p^b = y^n$***. Periodica Mathematica Hungarica, June 2015, Volume 70, Issue 2, 233-247.

61. (with B. He, A. Pinter, N. Varga), *A generalization of a problem of Mordell*. Glas. Mat. Ser. III,Vol. 50 (70) (2015), 35 – 41.

62. (with B. He, A. Pinter), *On simultaneous Pell equations and related Thue equations*. Proc. Amer. Math. Soc. **143** (2015), 4685-4693.

63. (with H. Zhu, M. Le), *On a pure ternary exponential Diophantine equation*. Publicationes Mathematicae Debrecen 2014 / 85 / 3-4 (10).

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65. (with S. Yang), *Proof of the P-integer conjecture of Pomerance*. Journal of Number Theory, 140 (2014) 226–234.

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72. (with S. Yang, B. He), *On the solutions of the exponential Diophantine equation $a^x+ b^y =(m^2+1)^z$*. Quaestiones Mathematicae, 36 (2013), 119-135.

73. (with D. Marques), *Fibonacci and Lucas numbers of the form $2^a + 3^b + 5^c$*. Proceedings of Japan Mathematics Academy, 89 Ser. A (2013) 47-50.

74. (with H. Godinho, D. Marques), *On the Diophantine equation $x^2 + 2^\alpha 5^\beta 17^\gamma = y^n$*. Communications in Mathematics journal, 20 (2012) 81-88.

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77. (with T. Miyazaki), *The Diophantine equation $(2am-1)^x+ (2m)^y =(2am+1)^z$*. International Journal of Number Theory, Vol. 08, No. 08, (2012) 2035-2044.

78. (with M. Le, H. Zhu), *On the exponential Diophantine equation $x^2 + p^{2m} = 2y^n$*. The Bulletin of the Australian Mathematical Society, Volume 86, Issue 02, October 2012, 303 - 314.

79. (with D. Marques), *On the sum of powers of consecutive terms of a linear recurrence sequence*. Bull Braz Math Soc., New Series 43(3), (2012) 397-406.

80. (with A. Filipin, B. He) *On a family of two-parametric D(4)-triples*. Glas. Mat. Ser. III, Vol. 47, No.1 (2012), 31-51.

81. (with B. He) *On a family of Diophantine triples $\{k, A^2k+2A ,(A+1)^2k+2(A+1)\}$ with two parameters II*. Periodica Mathematica Hungarica, 64 No. 1, (2012), 1-10.

82. (with D. Marques), *A Diophantine equation involving C-nomial coefficients*. East-West J. of Mathematics, Vol. 13, No 1 (2011) 75-79.

83. (with Y. Fujita), *Uniqueness of the extension of the $D(4k^2)$-triple $\{k^2-4, k^2, k^2+4\}$.* Notes on Number Theory and Discrete Mathematics, 17 No. 4 (2011), 42-49.

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

85. (with P. Yuan), *On a variant of a Diophantine equation of Cassels*. Glas. Mat. Ser. III, Vol. 46, No.2 (2011), 325-331.

86. (with D. Marques), *On terms of linear recurrence sequences with only one distinct block of digits*. Colloquium Mathematicum, 124 (2011), 145-155.

87. (with B. He, O. Kihel), *Solutions of a class of quartic Thue inequalities*. Computers and Mathematics with Applications 61 (2011) 2914–2923.

88. (with M. Cipu, M. Mignotte), ***On the size of the intersection of two Lucas sequences of Distinct type II***. Science China Mathematics 54 (2011) 1299-1316.

89. (with K, A. Broughan, M. J. Gonzalez, R. H. Lewis, F. Luca, J. M. Huguet) ***There are no multiply-perfect Fibonacci numbers.*** INTEGERS 11, (2011), 363-397.

90. (with S. Yang), ***On a conjecture of the power series coefficients of the function U(n, x).*** Annales des sciences mathématiques du Québec, 35, no. 1 (2011), 137-40.

91. (with B. He) ***On the positive integer solutions of the exponential Diophantine equation $a^x+(3a^2-1)^y=(4a^2-1)^z$.*** Advances in Mathematics (Chinese) Vol. 40, No. 2, (2011), 227-234.

92. (with B. He, P. G. Walsh) ***On the size of the intersection of two Lucas sequences of distinct type.*** Annales des sciences mathématiques du Québec, 35, no. 1 (2011), 31-61.

93. (with J. Luo, P. Yuan), ***On some equations related to Ma's conjecture.*** INTEGERS 11A, (2011), Article 27.

94. (with S. Yang, B. He), ***Diophantine equations with products of consecutive values of a quadratic polynomial.*** Journal of Number Theory, 131, no. 10, (2011) 1840-1851.

95. (with B. He) ***On the D(-1) triple $\{1, k^2+1, k^2+2k+2\}$ and its unique D(1)-extension.*** Journal of Number Theory, Volume 131, Issue 1, (2011) 120-137.

96. (with D. Marques), ***On the sum of powers of two consecutive Fibonacci numbers***. Proceedings of Japan Mathematics Academy, Ser A, December 2010, 174-176.

97. (with S. Yang, B. He), *A note on the Diophantine equation $|a^x - b^y|=c$.* Mathematica Scandinavica Volume 107, Number 2, (2010) 161-173.

98. (with B. He, M. Ulas) **O**n the Diophantine equation $z^2 = f(x)^2 \pm f(y)^2$ **II.** The Bulletin of the Australian Mathematical Society 82 (2010) 187-204.

99. (with B. He, P. Yuan) ***On the Diophantine equation $X^2 - (p^{2m} + 1)Y^6 = -p^{2m}$***. Functiones et Approximatio Commentarii Mathematici Volume 43, Number 1 (2010), 31-44.

100. (with A. Filipin, B. He) ***On the D(4)-triple $\{F_{2k}, F_{2k+6}, 4F_{2k+4}\}$.*** Fibonacci Quart. 48 (2010), no. 3, 219–227.

101. (with D. Marques) ***Perfect Powers among Fibonomial Coefficients***. C. R. Acad. Sci. Paris, Ser. I 348 (2010) 717–720.

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103. (M. Ulas) **On the Diophantine equation $z^2 = f(x)^2 \pm f(y)^2$**. Publicationes Mathematicae Debrecen 76/1-2 (2010), 183-201.

104. (with O. Kihel, F. Luca) ***Variants of the Diophantine Equation $n! + 1 = y^2$***. Portugaliae Mathematica, Volume 67, Issue 1 (2010), 1-11.

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106. (with F. Luca) ***On the Diophantine Equation $x^4 - q^4 = py^3$***. Rocky Mountain Journal of Mathematics, vol. 40, no. 3, (2010) 995-1008.

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109. (with B. He, B. Jadrijevic) ***Solutions of a class of quartic Thue inequalities***. Glas. Mat. Ser. III, Vol. 44 (64) (2009), 309 – 321.

110. (with F. Luca, S. Tengely) ***On the Diophantine Equation $x^2 + C = 4y^n$***. Ann. Sci. Math. Québec **33** (2009), no 2, 171-184.

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140. ***A Parametric Family of Cubic Thue Equations***. J. Number Theory **107** (2004), 63-79 and Journal of Number Theory, Volume 150, (May 2015) Pages 206-207.

141. ***On the solutions of a family of sextic equations***. Number Theory for the Millennial, Bruce Berndt, et. al., editors, A.K. Peters Ltd, 2002, Volume III, 285-299.

142. ***On the solutions of a family of quartic equations***. Math. Comp. **69** (2000), 839-849.

143. ***On binary quadratic forms***. Proceedings of the 11th Conference of ACMS, 1997, 125-135.

GRANTS

1. (PI) *A parametric family of quartic Thue equations related with a Lecacheux-Washington field*, 2004 Summer Faculty Grant from Purdue Research Foundation, June-July 2004.
2. **(**PI) *The 2005-2006 Library Scholars Grant Program. Travel to University Laval, Quebec Canada.*

STUDENTS AND PROFESSIONAL ACTIVITIES

1. Advisor (with Prof. Abderrahmane Nitaj) of the Master degree student Epiphane K. Nouetowa at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on September 13, 2019.
    Title: ***Secure Implementation Of Electronic Money And Bitcoins.***
2. Advisor (with Prof. Alan Filipin) of the Master degree student Kouessi Norbert Adedji at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on September 13, 2019.
    Title: ***Conjectures on Diophantine Sets.***
3. Advisor (with Prof. Abderrahmane Nitaj) of the Master degree student Virgile Sedjro Romuald Dossou-Yovo at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on September 13, 2019.
    Title: ***Post Quantum Cryptography.***
4. Ph.D. student Serge Raphael Adonsou at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin.
    Title: ***On some Diophantine problems.***
5. Ph.D. student Euloge Bagnantissoun Tchammou at Institut de Mathématiques et de Sciences Physiques (IMSP), Gangbo, Benin.
    Title: ***On the number of solutions of systems Pell equations.***
6. Ph.D. student Benedict Vasco Normenyo at Institut de Mathématiques et de Sciences Physiques (IMSP), Gangbo, Benin. Defense on May 24, 2019.
    Title: ***Some Results on Repdigits and Lucas Sequences.***
7. Ph.D. student Chèfiath Awero Adegbindin at Institut de Mathématiques et de Sciences Physiques (IMSP), Gangbo, Benin.
    Title: ***On the link between some sequences.***
8. Ph.D. student Salah Ricane Salah (with Prof. Mohand Ouamar Hernane) at Université des Sciences et de la Technologie, Alger, Algérie.
    Title: ***Sur Les Familles d'Equations de Thue.***
9. Advisor of the Master degree student Serge Raphael Adonsou at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on December 13, 2018.
    Title: ***On Pillai's problem***
10. Advisor of the Master degree student Essohanam Alou at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on December 13, 2018.
    Title: ***Jesmanowicz' conjecture and related problems***
11. Summer Research student Nicholas M Chimitt (with Prof. Li Tan) at Purdue University Northwest, Westville, IN, USA.
    Title: **Noninvasive EEG-Based Brain Machine Interface with Monitor and Control Applications.**
12. Late Ph.D. student Victorin Togan at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. (Incomplete)
    Title: ***Sur Les systemes d'equations de Pell.***
13. Advisor of the Ph.D. student Japhet Odjoumani at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on March 14 2018.
    Title: ***Sur les équations quartiques de Thue et le problème d'UPIB dans un corps biquadratique.***
14. Advisor of the student Armand Noubissie for a Master degree at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on December 23, 2017.
    Title: ***Pell Equations And Linear Recurrent Sequences.***
15. Advisor of the student Japhet Odjoumani for a Master degree at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin on January, 2015.
    Title: ***La methode de Tzanakis pour etudier une classe d'equations quartiques de Thue.***
16. Advisor of the Ph.D. student Appolinaire Codjo Dossavi-Yovo at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin. Defense on October 12, 2016.

Title: ***Sur Les Ensembles Diophantiens.***

17. External reviewer for the defense of the Ph.D. dissertation of Adrian William Dudek at The Australian National University, Canberra, Australia on April, 2016.
    Title: ***Explicit estimates in the Theory of Prime Numbers***
18. External reviewer for the Ph.D. dissertation of Sylvain Attan at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin on January, 2015.
    Title: ***Une generalisation tordue des algebres de Bol : Les Hom-algebres de Bol***
19. Advisor of the student Appolinaire Codjo Dossavi-Yovo for a Master degree at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin on October 16, 2014.
    Title: ***Sur Les Ensembles Diophantiens.***
20. External reviewer for the defense of the Ph.D. dissertation of Wenyong An at University of Waterloo, Waterloo, Canada on May 23, 2014.
    Title: ***Families of Thue Inequalities with Transitive Automorphisms***
21. President of the jury for the defense of the Ph.D. dissertation of Donatien Gaparayi at Institut de Mathématiques et de Sciences Physiques (IMSP), Porto Novo, Benin on August 3, 2013.
    Title: ***Hom-algebres de Lie-Yamaguti.***
22. MAA representative (liaison), 2007- present.
23. Chair MAA Indiana Section 2015-2016.
24. Vice-Chair MAA Indiana Section 2014-2015.
25. Main organizer and speaker of the CIMPA-ICTP-IMU research school in Ivory Coast 2017.
26. Organizer and speaker of the African Mathematical School in Cape Verde 2015.
27. Main organizer and speaker of the CIMPA-ICTP-IMU research school in Benin 2014.
28. Meredith Deters, On knots: An application to DNA, a paper presented at the 19th Annual Rose-Hulman Undergraduate Mathematics Conference, Rose-Hulman Institute of Technology, Terre Haute IN, March 15 and 16, 2002.
29. Jessami Ofcarcik, *On the Klein bottle*, a paper presented at the 18th Annual Rose-Hulman Undergraduate Mathematics Conference, Rose-Hulman Institute of Technology, March 16 and 17, 2001.
30. Project NExT (New Experiences in Teaching), Illinois Section of MAA, 1999-2001.
31. Sponsor of Math Club of Greenville College (a section of MAA) 2001-2003.
32. Coordinator of Greenville College – Hope Africa University, 2001-2003.
33. Eisenhower Professional Program, Summer 2002, *Turning Math Students into Problem Solvers*, Greenville College, June 24-28, 2002.

SABBATICAL

August – December 2010 at Institut Mathématique de Bordeaux, Université de Bordeaux I (France).
August – December 2017: Travels to Benin, South Africa, France, UK, Hungary, China.

RECENT CONFERENCES AND TALKS

1. *Journées Arithmétiques*, Istanbul, Turkey, July 1, 2019. Title: ***On Pillai's problem with Pell numbers and powers of.***
2. *FWDERP 2019*, Bursa, Turkey, July 7, 2019. Title: ***On a family of biquadratic fields that do not admit a unit power integral basis.***
3. *Seminar MSCS, PNW,* Hammond, IN USA, November 30, 2018. Title: *Can a repdigit be a sum of members of two different sequences of integers?*
4. *Integers Conference 2018,* Augusta, GA USA, October 3-6, 2018. Title: *Perfect Powers that are sums of two powers of Fibonacci numbers.*
5. *CNTA Meeting XV,* Quebec City, Canada, July 3-14, 2018. Title: *Repdigits as sums of members of other sequences.*
6. *Seminar on Number Theory,* Xiamen, China, June 30, 2018. Title: *Repdigits as sums of members of other sequences*
7. *Spring 2018Tri-Section meeting of the Mathematical Association of America*, Friday & Saturday, March 23-24, 2018, Valparaiso University, Valparaiso IN.

8. *Public Talk at Aba Teacher's University*, Shuimo, China, October 19, 2017. Title: ***Diophantine m-tuples' challenges and a generalization of a Baker-Davenport theorem.***
9. *Journées Arithmétiques*, Caen, France, July 3, 2017. Title: ***Pell equations and sequences.***
10. *Séminaire Général IMSP*, Dangbo, Bénin, June 28, 2017. Title: ***Pell equations and sequences.***
11. *Super QVNTS: Kummer Classes and Anabelian Geometry*, Burlington VT, September 10-11, 2016.
12. *Colloque Journées CIMPA-Algeria 2016,* Tipaza, Algeria, May 29-30, 2016. Title: On the x-coordinates of Pell equations which are in some sequences.
13. *CoE-MaSS seminar,* University of the Witwatersrand, South Africa, May 20, $2016. Title: On the x-coordinates of Pell equations which are in some sequences.
14. *COC Math Colloquium*, College of Charleston, Charleston, SC USA, April 15, 2016. Title: Diophantine m-tuples and Challenges.
15. *MCSS Colloquium,* Purdue University Calumet, Hammond, USA, March 31, 2016. Title: Diophantine m-tuples and Challenges.
16. *Spring 2016 meeting of the Indiana Section of the Mathematical Association of America*, Friday & Saturday, March 18-19, 2016, Franklin College, Franklin IN.
17. *Computational Aspects of Diophantine Equations*, Paris Lodron University of Salzburg, Austria, February 16, 2016. Title: Diophantine triples of Fibonacci Numbers.
18. *Seminar on Number Theory and Algebra*, University of Zagreb, Zagreb, Croatia, February 10, 2016. Title: On Diophantine equations involving normalized binomial mid-coefficients.
19. *Joint Mathematics Meetings,* Seattle WA, January 6–9, 2016.
20. *Fall 2015 meeting of the Indiana Section of the Mathematical Association of America*, Saturday, October 17, 2015, Purdue University North Central, Westville IN.
21. *Summer school "**Pure and Applied Number Theory School**"*, Daejeon, South Korea on July 9-12, 2015: Talk1: Diophantine equations 1: Diophantine m-tuples and challenges. Talk 2: Diophantine equations 2: On Diophantine equations involving normalized binomial mid-coefficients. Talk 3: Diophantine equations 3: On the number of solutions of a family of Diophantine inequalities.
22. *Journées arithmétiques*, Debrecen, Hungary July 7, 2015. Title: On P-integers.
23. *Spring 2015 meeting of the Indiana Section of the Mathematical Association of America*, Friday & Saturday, March 13-14, 2016, Taylor University, Upland IN.
24. CSIRC Event Presentation 2014, Chesterton, IN, October 28, 2014. Title: My academic journey and Diophantine equations
25. *Fall 2014 meeting of the Indiana Section of the Mathematical Association of America*, Saturday, October 18, 2014, Trine University, Angola IN.
26. Conference in Number Theory and Discrete Mathematics, Brock University, St Catharines, Canada, August 7-8, 2014. Title: On Diophantine mtuples.
27. Journée Internationale d'Arithmetique - 2014. Universite de Cocody, Abidjan, Cote d'Ivoire, July 24, 2014. Title: *On Diophantine mtuples.*
28. Séminaire de la Theorie des numbres, Universite de Lome, Lome, Togo, July 21, 2014. Title: *The P-integer Conjecture of Pomerance*.
29. *Quebec-Maine Number Theory Conference*, October 5-6, 2013, University of Maine, Orono. Title: On Diophantine equations involving normalized binomial mid-coefficients.
30. **Thue 150**, University of Bordeaux I, September 30 to October 4, 2013.
31. *Math Club meeting*, PNC September 23, 2013. Title: On the number of solutions of a family of Diophantine inequalities.
32. *Seminar Mathematics*, Brock University, Canada, June 12, 2013. Title: On the number of solutions of a family of Diophantine inequalities.
33. *Number Theory with a view towards Transcendence and Diophantine Approximation*, Ottawa, Canada June 8-10, 2013. Title: On the number of solutions of a family of Diophantine inequalities.

34. *Fall 2012 meeting of the Indiana Section of the Mathematical Association of America*, Saturday, October 27, 2012, Indiana University East, Richmond, IN.
35. *Quebec-Maine Number Theory Conference*, September 29-30, 2012, University Laval in Quebec. Title: On the Diophantine equation $a^x + b^y = c^z$.
36. *Workshop on the computer algebra system PARI/GP*, January 14-18, 2013, Bordeaux 1 University, France.
37. *Spring 2013 meeting of the Indiana Section of the Mathematical Association of America*, Friday & Saturday, March 27, 2013, Butler University, IN.
38. *Number Theory Seminar*, West Lafayette IN, February 17, 2012. Title: Diophantine equations with products of consecutive values of a quadratic polynomial.
39. *2012 Spring Western Section Meeting*. March 3-4, 2012, University of Hawaii at Manoa, Honolulu, HI. Title: Diophantine equations with products of consecutive values of a quadratic polynomial.
40. *Hawai'i Conference on "Algebraic Number Theory, Arithmetic Geometry and Modular Form*s" (HCANTAGME), University of Hawai'i, March 6-8, 2012. Title: On the Diophantine equation $x^4 - q^4 = py^r$.
41. December 5, 2011: Talk of Dr. Alain Togbe, Professor of Mathematics at PNC. Title: A second experience in China.
42. *Brock International Conference in Number Theory*, Brock University, Canada, on Friday September 9, 2011. Title: On the size of the intersection of two Lucas sequences of distinct type.
43. Zhaoqing University, Zhaoqing, China, on Friday November 18, 2011. Title: *On the education in USA.*
44. Université Bordeaux I, Bordeaux, France, on Friday November 12, 2010. Title: *On the Diophantine equation $AX^2 – BY^{2n} = C$.*
45. ETH Zurich, Zurich, Switzerland, on Thursday November 4, 2010. Title: *On the Diophantine equation $AX^2 – BY^{2n} = C$.*
46. University of Debrecen, Debrecen, Hungary, on Tuesday October 4-8, 2010. Title: *On Families of Diophantine triples.*
47. PNC, Westville, March 2, 2010. Title: *On two cases Diophantine equations.*
48. Zhaoqing University, Zhaoqing City, Guangdong Province, China, on Tuesday November 24, 2009. Title: *Recent progress on the Diophantine equation $AX^2 - BY^4 = C$.*
49. The University of Hong Kong, Hong Kong on Monday November 23, 2009 Title: *On families of Diophantine triples.*
50. South China Normal University, Guangzhou, Guangdong Province, China, on Thursday November 19, 2009. Title: *Recent progress on the Diophantine equation $AX^2 - BY^4 = C$.*
51. *The 7th Pan African Congress of Mathematicians*, Yamoussoukro (Ivory Coast), August 3-8, 2009. Title: *On Families of Diophantine triples.*
52. *Number Theory Seminar*, West Lafayette IN, April 9, 2009. Title: *On Families of Diophantine triples.*
53. *2009 AMS Spring Central Sectional Meeting*, Urbana, IL, March 27-29, 2009. Title: *Variants the Diophantine Equation $x! + 1 = y^2$.*
54. *Kappa Mu Epsilon Talk*, Department of Mathematics and Actuarial Sciences, October 23, 2008, Butler University. Title: *On Families of Diophantine triples.*
55. *Le Congres Quebec-Maine*, October 4-5, 2008, Universite Laval, Quebec, Canada. Title: *On the number of solutions of the Diophantine equation $ax^m - by^n = c$.*
56. *CNTA Meeting X, Waterloo*, Canada, July 13-18, 2008. Title: *Simultaneous Pell equations with a single or no solution.*
57. *ANTS VIII,* Banff, Canada, May 10-16, 2008. Title: *On the Diophantine Equation $x^2 + 2^\alpha 5^\beta 13^\gamma = y^n$.*
58. *West Coast Number Theory Conference*, December 16-20, 2007, Asilomar Conference Grounds, Monterey, California. Title: *On the positive integral solutions of the Diophantine equation $x^3 + by + 1 - xyz = 0$.*
59. *Thirty-fifth Annual Mathematics & Statistics Conference Number Theory*. September 28-29, 2007, Miami University, Oxford, Ohio. Title: *On the Diophantine equation $x^2 + 7^{2k} = y^n$.*
60. *Illinois Number Theory Fest at UIUC*, May 17-19, 2007, Urbana-Champaign, IL. Title: *A parametric family of sextic Thue equations.*

61. *West Coast Number Theory Conference*, December 17-21, 2006, UBC, Ensenada, Mexico. Title: *On the Diophantine equation $x^2 + C = y^n$.*
62. *Canadian Number Theory Association IX Meeting*, July 9-16, 2006, UBC, Vancouver, Canada. Title: *A generalization of a theorem of Bumby on quartic Diophantine equations.*
63. *The Spring 2006 Faculty Student Multidiscipline International Conference on Research and Teaching*, Mai 24 – 27, 2006, Ruston LA.
64. *Number Theory Seminar*, Purdue University, West Lafayette. April 12, 2006.Title: *On the solutions of a family of quartic Thue equations II.*
65. *Spring 2006 AMS, Central Section meeting*, Notre Dame University, April 8-9, 2005. Title: *On the Diophantine equation $x! + 1 = y^2$.*
66. *Spring 2006 MAA*, Indiana Section meeting, Taylor University, March 17-18, 2006.
67. *The XXIVièmes Journées Arithmétiques* (JA 2005) July 4-8, 2005, Marseille, France. Title: *On the solutions of a family of Thue equations.*
68. *Spring 2005 MAA, Indiana Section meeting*, IP-Fort Wayne, April 1-2, 2005. Title: *On solutions of families of Diophantine equations.*
69. *Canadian Mathematical Society Winter Meeting*, December 11-13, 2004, McGill University, Montreal, Canada.
70. *Canadian Number Theory Association VIII Meeting*, June 20-25, 2004, University of Toronto, Canada.
71. *Enterprise 2004 Hawaiian International Faculty Student Conference*, Mai 26 – 31, 2004, Waikiki Resort Hotel, Honolulu, Hawaii.
72. *Enterprise 2003 Hawaiian International Faculty Student Conference*, Mai 22 – 27, 2003, Waikiki Resort Hotel, Honolulu, Hawaii.
73. *Seminar in Number Theory*, Purdue University (West Lafayette, IN), January 22 2003.
74. *Joint Meetings in Mathematics*, Baltimore, MD, January 15-18, 2003.

EDITORIAL DUTIES
1. International Journal of Applied Mathematics & Statistics (IJAMAS)
3. Journal of Algebra, Number Theory and Applications (JANTA)
4. College Mathematics journal (CMJ - MAA)

REFEREE DUTIES
Acta Arithmetica, Journal of Number Theory, International Journal of Number Theory, Journal de la Theorie des nombres de Bordeaux, Publicationes Mathematicae Debrecen, Computers and Mathematics with Applications, INTEGERS, Science China Mathematics, Annales des sciences mathématiques du Québec, The Bulletin of the Australian Mathematical Society, The Glasgow Mathematical Journal, Mathematics of Computation, Monatshefte für Mathematik, …

PROFESSIONAL MEMBERSHIP
American Mathematical Society (AMS) 1996 - 2011.
Association for Christians in the Mathematical Sciences (ACMS) since 1996.
Mathematical Association of America (MAA) since 1998.
Canadian Mathematical Society (CMS) since 2004-2011.