

Curriculum Vitae

Personal Data

Title	Prof.
First name	Celestin
Name	LELE
Current position	Professor for Mathematics and vice dean in charge of research and cooperation
Current institution(s)/site(s), country	University of Dschang/ Faculty of Science, Cameroon
Most of my publications are available on DBLP	dblp: Célestin Lélé

Qualifications and Career

Stages	Periods and Details
Degree programme	1994 – 1996 Master degree in Mathematics , University of Yaounde I, Cameroon completed with Good Grade
Doctorate	1997 – 2001 Ph.D. In Mathematics, title of thesis:” Some Fuzzy Algebraic Concepts”, Harbin Institute of Technology; China, supervisor: Prof. WU Congxin
Postdoctoral	2003 Postdoctoral visiting position with DAAD Grant; University of Duisburg-Essen, Hosting by Prof. Dr. Rüdiger Göbel
Stages of academic/professional career	Since 2019 Full Professor for Mathematics and Theoretical Computer Science, University of Dschang 2012-2019; Associate Professor for Mathematical Logic and Algebras, University of Dschang 2004-2012 Senior Lecturer of Mathematics; University of Dschang; 2002-2004 Assistant Lecturer, University of Yaounde I;

Memberships:

From 2007 to Present	Life member, Clare Hall, University of Cambridge
From 2006 to Present	Coordinator of Africa Network on Algebras, Geometry and application in development (RAAGAD)
From December 1999 to present	Member of the Japanese Association of Mathematical Sciences.
From 1995 to present	Member of the Research Team Working on Algebra and Logic (ERAL)

GRANTS AND AWARDS

Grants	Place
PhD grant to study in China	Harbin Institute of Technology
post-doc to study in France	University of Nice
DAAD for study in Germany	University of Dresden, Mannheim, Potsdam, Essen
Clare Hall visiting fellow grant to study In UK	University of Cambridge
Fulbright grant	University of Oregon
Grant as visiting Professor	IHES at Paris

MOST RECENT INTERNATIONAL CONFERENCES OUT OF THE COUNTRY OF RESIDENCE

Workshop	Period	Country
107 th Workshop on General Algebra	20-22 June 2025	Switzerland
Workshop AAA.105 (Arbeitstagung Allgemeine Algebra), Olomouc	7-9 Februar	Czech Republic
The 9 th edition of the conference TACL (Topology, Algebra and Categories In Logic), Barcelona	1-5 July -2024	Spain
Workshop AAA.105 (Arbeitstagung Allgemeine Algebra), Prague	May 30 - June 2 nd , 2024	Czech Republic
The 7 th edition of the conference "Logic, Algebra and Truth Degrees" (LATD) + MOSAIC Kick-off meeting	September 4-11, 2022	Italy
The sixth edition of the conference "Logic, Algebra and Truth Degrees" (LATD)	August 28-31, 2018	Switzerland
77 th Workshop on General Algebra, Potsdam,	March 20-22, 2009	Germany

MOST RECENT INTERNATIONAL CONFERENCES ORGANIZED OR CO-ORGANIZED

(CRAG-10) 10 th annual workshop on cryptography, algebra, geometry and application; July 27 to July 30, 2021	University of Dschang
FERED 2020, 25-28 November 2020	University of Dschang
(CMI-2019) First International Symposium of Mathematics and Computer Science	University of Dschang
Annual Workshop on algebra, Logic, Geometry and Applications / Once a year starting from 2002 to present	University of Yaoundé I
(CRAG-8) 8 th annual workshop on cryptography, algebra, geometry and application; July 16 to July 28, 2018	University of Yaoundé I
(CRAG-6) 6 th annual workshop on cryptography, algebra, geometry and application; June 6 to June 17, 2016	University of Bamenda

Supervision of Researchers

I have refereed and published many research papers in many Journals of Mathematics. I have also taught a wide range of courses ranging from beginning to upper division at University of Dschang, University of Yaoundé, University of Douala, and University of Bamenda... In addition, I have guided many students for PhD and Masters at the University of Dschang, the University of Bamenda and the University of Yaoundé.

LIST OF ACADEMIC PUBLICATIONS

CELESTIN LELE

A. Publications with peer review process

2025

- (1) C. O. Kanga, S. Atamewoue, C. Lele, L. Strngmann: *Some properties of (strong) semi-divisible residuated lattices and modal operators*, Journal of Applied Non-Classical Logics (2025), 1-22.
- (2) C. O. Kanga, L. Strngmann, C. Lele and A. G. Talle Kakeu: *(Strong) semi-prelinearity in bounded commutative and integral residuated lattices*, preprint.

2024

- (3) Djongoue Nana E., Tallee Kakeu A. G., Koguep Njionou, B. B., Lele Celestin, Triangle Algebras and Relative Co-annihilators. Transactions on Fuzzy Sets and Systems. Vol.3, No.1, (2024), 43-56.
- (4) F. Demlabi, A. Tallee and B. B. Koguep, C. Lele, Pure filters and topological spaces on triangle algebras, Categories and General Algebraic Structures with Applications (2024), ID: CGASA-2403-1477.
- (5) Tallee Kakeu A. G., Diekouam L. E., Koguep N B. B., Lele Celestin, Akume D. (2024). Stable Topology on Ideals for Residuated Lattices. Transactions on Fuzzy Sets and Systems. Vol.3, No.1, (2024), 151-170.

2023

- (6) Aubin Kouankam Djouhou Lea, Koguep Njionou Blaise Bleriot, and Lele Celestin. Application of soft sets theory to multilattices. Annals of Fuzzy Mathematics and Informatics 26.3 (2023): 245-259.
- (7) F. Woumfo, E.R.Temgoua and C. Lele, The prime state ideal theorem in state residuated lattices, Categories and General Algebraic Structures with Applications, 18 (1), 131-153, (2023).
- (8) Blaise B. Koguep Njionou, Leonard Kwuida, C. Lele, Formal Concepts and Residuation on Multilattices, Fundamenta Informaticae 188(4) (2023), 217-237, <https://doi.org/10.3233/FI-222147>

- (9) F. Woumfo, A. G. Tallee Kakeu, B. B. Koguep, C. Lele, State relative annihilators in state residuated lattices, *Annals of Fuzzy Mathematics and Informatics*, 26(1)2023, 1-15.
- (10) A. G. Tallee Kakeu, Lutz Strüngmann, Blaise B. Koguep, Celestin Lele, \mathcal{L} -fuzzy annihilators in residuated lattices, *Mathematica Slovaca*, 73(6)2023, 1359-1372.

2022

- (11) LELE, C., Nganou, J.B, and Oumarou, C. Quasihyperarchimedean BL-algebras, *Fuzzy Sets and System* (<https://doi.org/10.1016/j.fss.2022.12.007>, online 14-12-2022)
- (12) A. G. Tallee Kakeu, Blaise B. Koguep, Celestin Lele, Lutz Strüngmann, Relative annihilators in bounded commutative residuated lattices, *Indian Journal of Pure and Applied Mathematics*, 2022, <https://doi.org/10.1007/s13226-022-00258-1>
- (13) A. G. Tallee Kakeu, Lutz Strüngmann, Blaise B. Koguep, Celestin Lele, α -ideals in bounded commutative residuated lattices, *New Mathematics and Natural computation*, 2022, DOI: 10.1142/S1793005723500254
- (14) F. Woumfo, B.B. Koguep, E.R.Temgoua and C. Lele, State ideals and state relative annihilators in De Morgan state residuated lattices, *International Journal of Mathematics and Mathematical Sciences*, Volume 2022, Article ID 6213448, (2022), 1-14.
- (15) Keubeng , D. Diekouam, L. and LELE, C. (f, g) derivation in residuated multilattice, *Soft computing*,(2022)-8221-8228

2021

- (16) LELE, C., Nganou, J.B, and Oumarou, C. Ideals of semisimple MV-algebras and convergence along set-theoretic filters, *Fuzzy Sets and Systems* (doi.org/10.1016/j.fss.2021.09.019, online 30-09-2021)
- (17) Nganteu, C. Kianpi, M. and LELE, C. On MV-coalgebras over the category of BL-algebras. *Soft Comput.* 25(20) : 12805-12815 (2021)

2020

- (18) Keubeng , D. Diekouam, L. Akume, D. and LELE, C. Some type of derivations in bounded commutative residuated lattice ; *Journal of Algebraic Hyperstructures and Logical Algebras*, 4, 21-37 (2020).
- (19) Tsafack Surdive Atamewoue, S. Ndjeya, L. Strungmann, LELE, C. Fuzzy linear codes over, *Fuzzy Information and Engineering*,(2020) doi.org/10.1080/16168658.2019.1706959

- (20) Woumfo, F. Koguep, B.B.N. Temgoua, E. and LELE, C. Ideals and Bosbach States on Residuated Lattices ; *New Mathematics and Natural Computation*, 16, 551-571 (2020).

2019

- (21) Maffeu, LELE, C. Nganou, J. and Temgoua, E., Multiplicative and Implicative derivations on Residuated lattices ; *Soft Computing* (2019). DOI : 10.1007/s00500-019-04184-z.
- (22) Maffeu, N., LELE, C. Schmit, S.E, J. and Temgoua, E., f-derivations on Residuated multilattices ; *Journal of Hyperstructures* 81-93 (2019)
- (23) Kengne, P. C. Koguep, B.B.N. Akume, D. and LELE, C. L-Fuzzy Ideals of Residuated Lattices ; *Discussiones Mathematicae General Algebra and Applications*, 39, (2019).
- (24) Tchoua, F. Koguep, B.B.N. Temgoua, E. and LELE, C. n-fold Boolean, Implicative and Integrales Ideals in Bounded Commutative Residuated Lattices ; *New Mathematics and Natural Computation*, 15,427- 445 (2019).
- (25) Koguep, B. B. N. and LELE, C. On hyperlattices : congruence relations, ideals and homomorphism ; *Afrika Matematika*, 30, 101-111(2019).

2018

- (26) A. Heubo-Kwegna, LELE, C., S. Ndjeya, J. B. Nganou : BL-rings. *Logic Journal of the IGPL* 26(3) : 290-299 (2018)
- (27) Surdive Atamewoue Tsafack, Selestin Ndjeya ,Lutz Strungmann and LELE, C. Codes Over Hyperfields , *Discussiones Mathematicae General Algebra and Applications* 37(2017)147-160
- (28) T. S. Atamewoue, S.Ndjeya and LELE, C. Coding theory and hyper BCK-algebras, *Journal of hyperstructures* (2017).

2017

- (29) Blaise Njionou Koguep and LELE, C. Weak-Hyper Lattices Derived From Fuzzy Congruences, *Discussiones Mathematicae General Algebra and Applications* 37 (2017) 75-91
- (30) Kadji A, C. LELE, M. Tonga : Fuzzy prime and maximal filters of residuated lattices. *Soft Comput.* 21(8) : 1913-1922 (2017)
- (31) Kadji. A, C. LELE, J. B. Nganou : Generalized Lukasiewicz rings. *Soft Comput.* 21(10) : 2469-2476 (2017)

2016

- (32) Kadji. A , LELE, C. and Nganou, J.B., A non-commutative Generalization of Lukasiewicz Rings, *Journal of Applied Logic* 16(2016)1-13

- (33) Atamewoue, T. S. Jun, B. Y. LELE, C. Ndjeya, S. and Seok-Zun, S., Codes Based on Residuated Lattices, Commun. Korean Math. Soc. 31 (2016), No. 1, pp. 27-40
- (34) LELE, C and Nganou, J. B, The Chang-Mundici's l -group of a BL algebra, Houston Journal of Mathematics, Vol. 42, No. 1, 2016 pp. 45-72.
- (35) Koguep, B. N. ; LELE, C, Nganou, J. B. ; Normal hyperlattices and pure ideals of hyperlattices. Asian-Eur. J. Math. 9 (2016), no. 1, 1650020, 14 pp
- (36) Kadji, A. LELE, C. Tonga, M. Some classes of pseudo-residuated lattices, Afrika Matematika, (2016)1-32

2015

- (37) Maffeu, N. Koguep, B. B. N. LELE, C. Kwuida, L. Fuzzy setting of residuated multilattices, Annals of fuzzy Mathematics and informatics 10(2015)929-948.

2014

- (38) Kadji, A., LELE, C., Nganou, J. B., M. Tonga, Folding theory applied to residuated lattice ; Internationale Journal of Mathematics and Mathematical Sciences, (2014, Art. ID 428940, 12 pp.)
- (39) Kadji, A. LELE, C. Tonga, M. Fuzzy n -fold filters of pseudoresiduated lattices. Int. J. Math. Math. Sci. 2015, Art. ID 386210, 10 pp. 06D72
- (40) LELE, C. Nganou, Jean B. Pseudo-addition and fuzzy ideals in BLalgebras. Ann. Fuzzy Math. Inform. 8 (2014), no. 2, 193-207.

2013

- (41) LELE, C and Nganou, J. B. Chang-Mundici Enveloping unital latticegroup of BL-algebras (Proceeding of TACL2013 on Topology, Algebra and Category with Logic, 2013, 166-169).
- (42) LELE, C. Fuzzy n -fold obstinate filters in BL-algebras. Afr. Mat. 24 (2013), no. 2, 127-133.
- (43) LELE, C., Nganou, J. B., MV-algebras derived from ideals in BLalgebras, Fuzzy Sets and Systems (2013)103-113

2012

- (44) Tebu, S., LELE, C., Nganou, J. B., Fuzzy n -fold BCI-positive implicative ideals in BCI-algebras, Internationale Journal of Mathematics and Mathematical Sciences, Doi : 10.1155/2012/628931(2012, Art. ID 628931, 8 pp.)
- (45) Turunen, E., Nganteu, C., LELE, C., A new characterization of n -fold positive implicative BL-logics, Advances on computational intelligence, (2012) 552-560

- (46) Turunen, E., Nganteu, C., LELE, C., n-fold implicative basic logic, soft computing, 16, (2012) 177-181.
- (47) Nganteu, C., LELE, C., Foldness of $(\epsilon, \epsilon \vee q)$ fuzzy filters in BLalgebras The Journal of Fuzzy Mathematics 20(2) (2012) 401-4012.
- (48) Nganteu, C., LELE, C., Relation diagram between fuzzy filters in BLalgebras, Annals of Fuzzy Mathematics and Informatics 4(1)(2012) 131-141
- (49) LELE, C. Nganou, Jean B. ; Tebu, S. n -fold commutative BCIalgebras. Sci. Math. Jpn. 75 (2012), no. 3, 279-287.
- (50) Tebu, S. F. ; LELE, C. Nganou, J. B. n -fold BCI-positive implicativeness. Sci. Math. Jpn. 75 (2012), no. 1, 56-67.

2011

- (51) LELE, C. Folding theory for fantastic filters in BL-algebras, (2011) IJALR 2(4) 32-42
- (52) LELE, C. Algorithms and computations in BL-algebras, (2011) IJALR 1(4) 29-47

2009

- (53) LELE, C. Fuzzy Endomorphism Rings of Abelian Groups, The Journal of Fuzzy Mathematics(2009) 17(3) 711-720
- (54) LELE, C. Folding theory of positive implicative/fuzzy positive implicative filters in BL-algebras, The Journal of Fuzzy Mathematics(2009) 17(3) 633-641.

2008

- (55) Koguep, B., Nkuimi, C., LELE, C. on fuzzy prime ideal of lattice, SAMSA Journal of pure and applied mathematics vol 3, (2008)1-11
- (56) Koguep, B., Nkuimi, C., LELE, C. On fuzzy ideals of hyperlattice, International Journal of Algebras, vol 2, no 15, (2008), 739-750
- (57) LELE, C., Moutari, S. Mbah, M, Algorithms and computations for foldness of P-ideals in BCI-algebras, Journal of applied Logic 6, (2008)580- 588
- (58) LELE, C., Moutari, S. On some computational methods for study of foldness of H- ideals in BCI-algebras, Soft computing 12, (2008)403- 407.

2007

- (59) LELE, C., Moutari, S. On some computational algorithms for n-fold ideals in BCK-algebras, J. Appl. Math. Computing 23, (2007) 369- 383
- (60) LELE, C., Moutari, S. On n-fold Quasi-assotiative ideals in BCIalgebras, SAMSA Journal of pure and applied mathematics, 2(1) : (2007) 1-12

2006

- (61) LELE, C., Moutari, S. Foldness of commutative ideals in BCK-algebras, *Discussiones Mathematicae, General Algebra and Application*, (2006) 111-135
- (62) LELE, C., Moutari, S. Some properties of fuzzy filters in BCI/BCKalgebras, *East-West J.of Mathematics* vol 7,no 2 , 141-152

2002

- (63) Jun, Y . B, LELE, C. Fuzzy point BCK/BCI-algebras, *International Journal of pure and Applied Mathematics. Vol.1* (2002) 33-39
- (64) Jun,Y.B.,Shim, H., LELE,C. Fuzzy filters/ ideals in BCI-algebras, *The Journal of Fuzzy Mathematics.10(2)(2002)* 469-474
- (65) Jun, Y.,B., Song, LELE,C foldness of quasi-assotiative ideals in BCIalgebras, *Ascientiae Mathematicae Japonicae*, (2002)227-231

2001

- (66) LELE, C., WU, C. , Njock, G., Tonga, M. some properties of fuzzy positive implicative ideals in BCK-algebras, *J. of Harbin Institute of Technology. (English Edition)* (2001) 168-172
- (67) LELE,C., WU, C. Some properties of fuzzy n-fold positive implicative ideals in BCK-algebras, *The Journal of Fuzzy Mathematics* vol.9,(2001) 927-936
- (68) LELE,C., WU, C. , Mamadou, T. Fuzzy filters in BCI-algebras, *I.J.M.M.S* (2001) 47-5
- (69) LELE,C., WU, C., Weke, P., Mamadou, T., Njock, G. Fuzzy Ideals and Weak Ideals in BCK-algebras, *Scientiae mathematicae Japonicae*, (2001) 599-612
- (70) LELE,C., WU, C. Some properties of Fuzzy Ideals in BCK-algebra, *Fuzzy systems and Mathematics* , (2001)10-16

2000

- (71) LELE, C., WU, C. Transfer Theorems for Fuzzy semi-groups, *J. of Harbin Institute of Technology. (English Edition)* (2000) 19-23

C. Publications without peer review process

- (1) LELE, C. Folding theory of some types of ideals in BCI-algebras, 77th Workshop on General Algebra (AAA77),Potsdam,(Germany) (2009)17-18
- (2) LELE, C. Foldeness of Fuzzy Filters in BL-algebras, 76th Workshop on General Algebra (AAA76), Linz, Austria (2008)13-14
- (3) LELE,C. Category of fuzzy BCK-algebras, 20th Conference for young algebraists, Potsdam,(Germany) (2005)10-11