

# Curriculum Vitæ

Bertuel TANGUE NDAWA  
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## CURRENT POSITIONS

- 1/2022- - **Reviewer**  
American Mathematical Society,  
416 Fourth Street, Ann Arbor, MI 48103 USA, [www.ams.org](http://www.ams.org).
- 10/2021- - **Assistant Professor**  
University of Ngaoundere,  
N1, Dang, 455, Ngaoundere (Cameroon), <https://www.univ-ndere.cm/>.

## RESEARCH AREAS

Dynamical System, Geometry and their Applications.

## CURRENT WORKS

- **Foliation version of deformation quantization.** With Michel NGUIFFO BOYOM and Stephane PUECHMOREL.
- **Translation (from French into English) of Koszul's works.** With Michel NGUIFFO BOYOM.

## PREPUBLICATIONS

- 9/2025 - **On the geometric quantization of  $\theta$ -almost twisted Poisson manifold,** arXiv :2509.21168, 17 pages. With N. Saipele Nansidi, and J. Dongho.
- 8/2025 - **Dynamics on Bi-Lagrangian Structures and Cherry maps,** arXiv :2508.12350, 13 pages.
- 7/2025 - **Character Varieties, Hexagonal 3-Webs And Hess Connection,** arXiv :2507.07542. With Frank LORAY, Arame DIAW, and Karamoko DIARRA.
- 2/2025 -  **$\theta$ -almost twisted Poisson cohomology,** arXiv :2502.18503,11 pages. With N. Saipele Nansidi, and J. Dongho.
- 11/2024 -  **$C^1$ -Diffeomorphism Class of some Circle Maps with a Flat Interval,** arXiv :2410.09442, 8 pages. With Carlos OGOUYANDJOU.

## PUBLICATIONS

- 6/2024 - **Rigidity of Fibonacci Circle Maps with a Flat Piece and Different Critical Exponents,** J. Dyn. Control Syst., 2025, 31 (13), <https://doi.org/10.1007/s10883-024-09687-z>.
- 9/2022 - **Infinite Lifting of an Action of Symplectomorphism Group on the set of some Bi-Lagrangian Structures,** J. Geom. Mech., 2022, 14 (3), pp. 409-426.

- 11/2021 | - **A Phase Transition for Circle Maps with a Flat Spot and Different Critical Exponents**, DCDS, 2021, 41(11), pp 5037- 5055. With Liviana PALMISANO.
- 12/2020 | - **Cherry Maps with Different Critical Exponents : Bifurcation of Geometry**, Rus. J. Nonlin. Dyn., 2020, 16 (4), pp. 651-672.

### RESEARCH IN RESIDENCE

- 10-11/2024 | -**Foliations and Geometry**, with Frank LORAY, Arame DIAW, and Karamoko DIARRA, AIMS (Sénégal).
- 3/2024 | -**Foliations and Geometry**, with Frank LORAY, Arame DIAW, and Pierre BIKORIMANA, CIRM (France).

### INVITED RESEARCH

- 7-10/25 | Institut des Hautes Études Scientifiques (IHES), Université Paris-Saclay .

### COMMUNICATIONS AND POSTERS

- 1/2026 | Connection linéaire d'applications de Cherry (Linear connection of Cherry maps), AFRIMATH (online).
- 2-3/2024 | - **Bi-Lagrangian Structures, Renormalization of Circle Maps with a flat piece** (poster), Brazil-France School on Foliation Theory, Analysis on fractals and networks, and applications, CIRM (France).
- 3/2021-3/2023 | - **Circle Maps with a Flat Piece and Different Critical Exponents : Bifurcation of Geometry**, LAGA seminar, University of Yaounde (Cameroun).
- 1/2023 | - **Cherry Maps with Different Critical Exponents : Bifurcation of Geometry**, CIMPA School, University of Windhoek (Namibia).
- 9/2022 | - **Dynamic of Bi-lagrangian structures**, ERMAS Conference, University of Yaoundé (Cameroun).
- 6/2022 | - **Dynamic of pair of some Distributions : Bi-lagrangian structures and theirs prolongations, and Cherry flow**, CIMPA School, Université Marien Ngoubi (Congo Brazzaville).
- 6/2022 | - **Infinite Lifting of an Action of Symplectomorphism Group on the Set of Bi-Lagrangian Structures** (online), Workshop in Geometric Topology, Texas Christian University (USA).
- 7/2019 | - **Lifting of Bi-Lagrangian Structures of some Manifolds on their Bundle Cotangent**, Ingénierie et la Modélisation des Systèmes, University of Lomé (Togo).
- 12/2015-1/2019 | - **Rigidity of Circle Maps with a Flat Piece, Renormalization of Circle Maps with a Flat Piece, Geometry of Circle Maps with a Flat Piece, Symplectic Manifolds, Bi-Lagrangian Manifolds, Extension of Poincaré's theorem**, Mathematics, Physics and General Seminars, CIMPA School, New Trends of Mathematical Methods in Physics School, IMSP (Benin).
- 7/2018 | - **Circle Maps with a Flat Piece** (poster), Summer School in Dynamics (Introductory and Advanced), ICTP (Italy).

10/2013-1/2014 - **Para-Kähler Manifolds, Bi-Lagrangian Manifolds, The Kv-Cohomology and Locally Flat Hypersurfaces**, Geometry, Topology and High Energy Physics Seminar, University of Douala (Cameroun).

### COURSE MATERIALS

- 6/2025 - **Introduction aux Variétés Symplectiques et de Poisson** (Eng. Introduction to Symplectic and Poisson Manifolds), 42 pages.
- 11/2023 - **Introduction à l'Algèbre Linéaire** (Eng. Introduction to Linear Algebra), 61 pages.
- 5/2023 - **Introduction à la Géométrie Algébrique** (Eng. Introduction to Algebraic Geometry), 24 pages.
- 3/2023 - **Introduction à la Topologie Algébrique** (Eng. Introduction to Algebraic Topological), 42 pages.
- 1/2023 - **Introduction à la Cryptographie** (Eng. Introduction to Cryptography), 35 pages.
- 12/2022 - **Introductions au Traitement du Signal** (Eng. Introduction to Signal Processing), 32 pages.
- 1/2022 - **Introduction à la Théorie des Ensembles et la Logique Mathématique** (Eng. Introduction to Set Theory and Mathematical Logic), 23 pages.
- 11/2021 - **Numération** (Eng. Numeration), 23 pages. With Blaise Omer YENKE.
- 11/2021 - **Introduction à la théorie de Probabilité** (Eng. Introduction to Probability theory), 36 pages.
- 10/2021 - **Introduction à la Statistique Descriptive et Inférentielle** (Eng. Introduction to Descriptive and Inferential Statistic), 48 pages.
- 3/2021 - **Analyse Numérique** (Eng. Numerical Analysis), 46 pages.
- 4/2020 - **Analyse Mathématique** (Eng. Mathematical Analysis), 143 pages. With Professor Thomas BOUETOU BOUETOU.

### TEACHING / TUTORING

- 2/2023- - **Symplectic and Poisson Geometries** (Teaching, In-class), Faculty of Sciences, (University of Maroua, and University of Ngaoundere (since 4/2025)).
- 2/2023-5/2023 - **Introduction to Algebraic Topological, Introduction to Algebraic Geometry** (Teaching, In-class), Faculty of Sciences, University of Maroua.
- 11/2021- - **Numeration, Statistic, Probability, Integral and matrix calculus, Analysis, Cryptography, Introduction to Signal Processing, Linear Algebra, Numerical Analysis** (Teaching, In-class), University Institute of Technology, Faculty of Sciences, University of Ngaoundere.
- 2/2020-6/2021 - **Analysis, Applied Mathematic 1&2, Introduction to Statistic** (Teaching, In-class and online), **Affine and Euclidean geometry, Algebra** (Tutoring, In-class and online), National Advanced School of Engineering of Yaoundé.

- 11/2019-6/2021 - **Statistics and Data Analysis, Numerical Calculation, Analysis 1&2, Operations Research** (Teaching, In-class and online), Institut Universitaire du Golfe de Guinée.
- 11/2019-1/2020 - **Algebra** (tutoring, In-class), National Advanced School of Engineering of Douala.
- 3/2017-7/2019 - **Linear Algebra** (tutoring, In-class). Institute of Mathematics and Physical Sciences.
- 4/2014-11/2015 - **Linear Algebra, and Analysis** (tutoring, In-class), University of Douala.

## EDUCATION

- 3/2017-9/2019 - **PhD in Mathematics (Dynamical System)**, *Circle Maps with a Flat piece and Different Critical Exponents*, University of Abomey Calavi (UAC).  
Written under supervision of Professor Marco Martens (Stony Brook University), the co-supervision of Professor Liviana PALMISANO (Uppsala University) and Professor Carlos OGOUYANDJOU (UAC).
- 11/2015-1/2017 - **Master in Mathematics (Dynamical System)**, *Circle Maps with a Flat piece and Irrational Rotation Number*, UAC.  
Written under supervision of Professor Marco Martens (Stony Brook University), the co-supervision of Professor Liviana PALMISANO (Uppsala University) and Professor Carlos OGOUYANDJOU (UAC).
- 10/2012-9/2013 - **Master in Mathematics (Symplectic Geometry)**, *Variétés Para-Kählériennes* (Eng. Para-Kähler Manifolds), University of Yaoundé I (UYI). Written under supervision of Professor Ferdinand NGAKEU (University of Douala) and the co-supervision of Professor Bitjong NDOMBOL (UYI).
- 10/2011-9/2012 - **Master First degree in Mathematics**, University of Douala.
- 10/2010-9/2011 - **Bachelor in Mathematics**, University of Douala.
- 10/2008-9/2009 - **Diploma in Mathematics**, University of Douala.

## LANGUAGES

- **French** (native speaker).
- **English** (a little less fluent ; in improvement).

## INTERNSHIP

- 10-9/2019 | **Data Science**  
Data Science Nigeria (Lagos).

## PROGRAMMING

- | Python, MATLAB, Mathematica ; in improvement.

## MISSIONS

- 6/2020 - **Exam correction** (Badjoun ; June, 2-4)
- 5/2018 - **Africa Centres Of Excellence (ACE) Project** (Ouagadougou ; May, 7-9), 12th Meeting of the ACE project steering committee and 9th project workshop.

- 4/2017 - **CEA-SMA Accreditation Meeting** (Bohicon; April, 12-15), Auto-évaluation des Masters de Mathématiques Fondamentales et Applications et de Technologie de l'Information et des communications (Eng. Self-assessment of the Masters in Fundamental Mathematics and Applications and in Information and Communication Technology).

## **SOCIAL SKILLS AND COMPETENCES**

### **Initiated Social Projects**

- 9/2023- - —, Dang (Ngaoundere, Cameroun) (1,2).
- 7/2017 - **IMSP vers des Orphelins** (Eng. IMSP towards Orphans), Koutongué, (Porto-Novo, Benin).
- 11/2015 - **Zion's Voice est Maroua** (Eng. Zion's Voice is Maroua), Maroua (Cameroon).

### **Social Positions**

- 3/2017-1/2018 - Head of IMSP Students' Association.
- 5/2014-11/2015 - Head of the Social Committee of Zion's Voice Choir.

## **ORGANIZATIONAL SKILLS AND COMPETENCES**

I like working in team and it is with enthusiasm that I explained to members what I think I understand.

## **TECHNICAL SKILLS AND COMPETENCES**

I have a little knowledge in electrical, plumbing, masonry, carpentry and agriculture; through practice.