

List of main refereed research publications

Mahouton Norbert Hounkonnou

September 13, 2022

(See full list of publications in:

www.researchgate.net/profile/Mahouton_Hounkonnou/)

181. (with M. J. Landalidji and M. Mitrović), *Hamiltonian dynamics of a spaceship in Alcubierre and Gödel metrics: Recursion operators and underlying master symmetries*, Theoretical and Mathematical Physics, volume **212**, pages 1001-1018 (2022)
180. (with F. Manfouo, T. V. Dikko, M. F. C. Fobasso, E. Balotcha, and A. J. Fotue), *Properties of acoustic polaron in free-standing slab*, Physica B **643**, 414172 (2022)
179. (with M. J. Landalidji and M. Mitrović), *Einstein field equation, recursion operators, Noether and master symmetries in conformable Poisson manifolds*, Universe 2022, **8**, 247 (2022); <https://doi.org/10.3390/universe8040247>
178. (with Mafoya Landry Dassoundo and Chengming Bai) *Anti-flexible bialgebras*, Journal of Algebra and Its Applications(2022) 2250212 (23 pages) (2022); <https://doi.org/10.1142/S0219498822502127>
177. (with Melanija Mitrović and Marian Alexandru Baroni), *Theory of Constructive Semigroups with Apartness - Foundations, Development and Practice*, Fundamenta Informaticae **184**(3): 233-271 (2021); <https://doi.org/10.3233/FI-2021-2098>
176. (with Remi C. Avohou, Joseph Ben Geloun), *Extending the Tutte and Bollobás-Riordan polynomials to rank 3 weakly coloured stranded graphs*, Combinatorics, Probability and Computing, 1-43 (2021); doi:10.1017/S096354832100050X
175. (with Isiaka Aremua and Komi Sodoga), *Density operator representation in multi-matrix vector coherent states: Landau problem in a harmonic potential background*, Reports on Mathematical Physics, Vol **88** (3), pp 327-350 (2021), DOI: 10.1016/s0034-4877(21)00084-7
174. (with M. J. Landalidji and M. Mitrović), *Noncommutative Kepler dynamics: symmetry groups and bi-Hamiltonian structures*, TMF, **207:3** (2021), 403423; Theoret. and Math. Phys., **207:3** (2021), 751769, <https://doi.org/10.4213/tmf10017>

173. (with F. C. Fobasso Mbognou, C. Kenfack-Sadem, A. J. Fotue, D. Akay, L. C. Fai), *Thermodynamics Properties and Optical Conductivity of Bipolaron in Graphene Nanoribbon Under Laser Irradiation*, Journal of Low Temperature Physics, (2021), <https://doi.org/10.1007/s10909-021-02573-z>.
172. (with C. Kenfack-Sadem, F. C. Fobasso Mbognou, A. J. Fotue, D. Akay, L. C. Fai), *Thermodynamic properties and optical absorption of polaron in monolayer graphene under laser field*, Journal of Low Temperature Physics, (2021), <https://doi.org/10.1007/s10909-021-02586-8>.
171. (with Isiaka Aremua, Ezinvi Baloitcha and Komi Sodoga), *Density operator formulation for magnetic systems: physical and mathematical aspects*, J. Math. Phys. bf 62, 013503 (2021); <https://doi.org/10.1063/5.0012588>.
170. (with Melong, Fridolin), *$R(p, q)$ Analogs of Discrete Distributions: General Formalism and Applications*, Journal of Stochastic Analysis: **Vol. 1** : No. 4 , Article 11 (2020), DOI: 10.31390/josa.1.4.11
169. (with Gbêvèwou Damien Houndedji), *2-hom-associative bialgebras and hom-left symmetric dialgebras*, Springer Nature Switzerland AG 2020 P. Kielanowski et al. (eds.), Geometric Methods in Physics XXX VIII, Trends in Mathematics, https://doi.org/10.1007/978-3-030-53305-2_7, 97 – 115.
168. (with Fridolin Melong and Mitrović), *Generalized Witt, Witt n - algebras, Virasoro algebras and KdV equations induced from $\mathcal{R}(p, q)$ - deformed quantum algebras*, arXiv:2008.04778v1 [math-ph], Reviews in Mathematical Physics, (2020), <https://doi.org/10.1142/S0129055X21500112>.
167. (with Mafoya Landry Dassoundo), *q -generalized (anti-) flexible algebras and bialgebras*, SUT J. Math. **56**, No 2, 71–92 (2020).
166. (with Mahougnon Justin Landalidji), *Hamiltonian dynamics for the Kepler problem in a deformed phase space*, Trends in Mathematics, (2019) (in press).
165. (with A. J. Fotue, T. V. Dikko , E. Baloitcha, F. C. Fobasso Mbognou, G. T. Tedondje), *Spin-orbit interaction on the thermodynamics of three-dimensional impurity magnetopolaron under strong parabolic potential* , Eur. Phys. J. Plus (2020) 135-430; <https://doi.org/10.1140/epjp/s13360-020-00441-5>.
164. (with Emanonfi Elias NDolo, Dine Ousmane Samary, Baloitcha Ezinvi), *Noncommutative Dirac and Klein-Gordon oscillators in the background of cosmic string: Spectrum and dynamics* International Journal of Geometric Methods in Modern Physics, **17**, 05, 2050078 (2020), DOI: 10.1142/s0219887820500784: World Scientific
163. (with Mafoya Landry Dassoundo), *Zinbiel algebras and bialgebras: main properties and related algebraic structures*, IOP Conf. Series: Journal of Physics: Conf. Series 1194 (2019) 012045, doi:10.1088/1742-6596/1194/1/012045.

162. (with Vincent J. M. Kiki and Villévo Adanhounme), *Pseudo-solution of weight equations in neural networks: application for statistical parameters estimation*, Mathematical Structures and Applications, In honor of Mahouton Norbert Hounkonnou, Editors: Toka Diagana and Bourama Toni (2018)©Springer, pp 359–374
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160. (with Isiaka Aremua, Ezinvi Baloïtcha and Komi Sodoga), *On Hilbert-Schmidt operator formulation of noncommutative quantum mechanics*, Mathematical Structures and Applications, In honor of Mahouton Norbert Hounkonnou, Editors: Toka Diagana and Bourama Toni (2018)©Springer, pp 61–118.
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157. (with Komi Sodoga and Isiaka Aremua) *Generalized photon-added associated hypergeometric coherent states: characterization and relevant properties*, Eur. Phys. J. D (2018) **72**: 172. <https://doi.org/10.1140/epjd/e2018-90230-8>
156. (with Alina Dobrogowska) *Factorization method and general second order linear difference equation*, In: Pinelas S., Caraballo T., Kloeden P., Graef J. (eds) International Conference on Differential and Difference Equations with Applications. ICDDEA 2017. Springer Proceedings in Mathematics & Statistics, **Vol 230**, Springer, Cham. (2018), pp 67–77
155. (with Komi Sodoga and Isiaka Aremua) *Photon-added coherent states for shape invariant systems*, Eur. Phys. J. D (2018) **90** 015207 (2015); doi:10.1088/0031-8949 / 90 / 1 / 015207.
154. (with Mahougnon Justin Landalidji and Ezinvi Baloïtcha) *Recursion operator in a noncommutative Minkowski phase space*, Trends in Mathematics, (2018) 83–93.
153. (with Gbêvèwou Damien Houndedji), *Solutions of associative Yang-Baxter equation and D–equation in low dimensions and associated Frobenius algebras and Connes cocycles*, Journal of Algebra and Its Applications, **Vol. 16**, (No. 11) (2018) 1850010. (26 pages) ©World Scientific Publishing Company DOI: 10.1142/S021949881850010X.
152. (with R. M. Keumo Tsiaze, A. V. Wirngo, S. E. Mkam Tchouobiap, E. Baloïtcha),

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149. (with P. Guha and T. Ratiu), *Generalized Virasoro algebra: left-symmetry and related algebraic and hydrodynamic properties*, J. of Nonlinear Math. Phys. **23** (1), 47 – 73, (2016).

148. (with E. H. Adjakossa, I. Sadissou, and G. Nuel), *Multivariate longitudinal analysis with bivariate correlation test*, PloS one, **11** (8) :e0159649, (2016).

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140. (with J. M. Allognon, E. Baloïtcha, J.D. Bukweli- Kyemba and H. V. Mweene) *Quantum mechanics of a two-dimensional anharmonic oscillator in a noncommutative space*, Phys. Scr. **90** 015207 (2015); doi:10.1088/0031-8949/90/1/015207.

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