

Dr. Emmanuel Lance Christopher VI M. Plan

Lecturer and Researcher

Contact

Building B1, 144 Xuan Thuy, Mai
Dich, Cau Giay, Hanoi
emmanuelplan@hsb.edu.vn
elcplan.wordpress.com

Education

Université Côte d'Azur (Nice, France)

Doctor of Philosophy in
Physics (07/2014-06/2017)

National University of Singapore (NUS)

Master of Science (Mathematics,
08/2011-07/2012)

Ateneo de Manila University (Philippines)

Bachelor of Science
(Mathematics, Magna Cum
Laude, 2006-2010)

Research Interest

Applied Data Science
Artificial Intelligence
Fintech
Non traditional security
(environmental, health,
economic)

Objective

A passionate academic who explores ideas and polishes results in order to optimize impact; intends to use my analytical skills in the interface of data science and various fields for both teaching and research; and contributes to a collective innovative and collaborative environment.

Experience

01/2022 - Present

Lecturer and Researcher • Hanoi School of Business and
Management (HSB), Vietnam National University, Hanoi (VNU)

- Responsible for improving and teaching mathematics, data science, and information technology-related courses to undergraduate and postgraduate students
- Doing research projects in the fields of information technology, policy, data analysis in economics, fintech, environmental and health security, and other non-traditional security fields

01/2020-12/2021

Lecturer and Researcher • Institute of Theoretical and Applied
Research • Duy Tan University, Viet Nam

03/2018-04/2019

Postdoctoral Research Assistant • Rudolf Peierls Centre for
Theoretical Physics • University of Oxford, United Kingdom

03/2010-05/2011, 11/2013-04/2014

Lecturer • Mathematics Department • Ateneo de Manila University,
Philippines

Key Skills

Teaching
Research
Mentoring

Languages

Filipino (Tagalog): Native
English: Fluent
French: Intermediate (B1-B2)
Vietnamese: B1

Publications (local Vietnamese and international, including conference proceedings)

1. **E.L.C. VI M. Plan**, D.T. Nguyen, D.T.L. Nguyen, D.H. Kieu. Textual bag-of-words analysis to measure ESG disclosure from Vietnamese annual reports: a methodological study. Accepted in 2025. (Conference proceedings of CIEMB 2025)
2. **E.L.C. VI M. Plan**, V.Q. Trinh. Barriers to the adoption of agglomeration technology: case study in Vietnam. Accepted in 2025. (Conference proceedings of ICERES 2025, IOP Conference Series: Earth and Environmental Science)
3. **E.L.C. VI M. Plan**, D.B.M. Do, X.T. Pham, L.K.L. Vu, T.H.N. Nguyen. Examining wash trading in NFT collections: case of two collections. Accepted in 2025. (Conference proceedings of DEFI 2025, IEEE Systems, Man, & Cybernetics Society)
4. P.D. Hoang, **E.L.C. VI M. Plan**, T.H.N. Nguyen. Before and after wash trade detection in Ethereum NFTs: Evidence for the Mixture of Distribution Hypothesis and Sequential Information Arrival Hypothesis and effect of collection characteristics. *Emerging Markets Finance and Trade*, pp. 1-12. doi: 10.1080/1540496X.2025.2555376
5. **E.L.C VI M. Plan**, T.H. Le, D.M. Le, and H. Phan. Temporal considerations in the 2021 COVID-19 lockdown of Ho Chi Minh City. *Lecture Notes in Networks and Systems* 1569: 347-358. doi: 10.1007/978-3-032-00267-9_31
6. N.N. Nguyen, **E.L.C. VI M. Plan**. Early childhood characteristics as predictors of non-cognitive skills of Vietnamese: a machine learning approach. *Journal of Finance & Accounting Research* 4(35):140-144. doi: 10.71374/jfar.v25.i4.28
7. H.H.P. Nguyen, **E.L.C. VI M. Plan**. Ứng dụng học máy trong dự báo doanh thu của một nhà phân phối gạch tại Việt Nam [Machine Learning Application in Revenue Forecasting of a Tile Distributor in Vietnam]. *Kinh Tế Dự Báo [Economy and Forecast Review]* 7(13):126-129 (2025).
8. D.T.S. Nguyen, **E.L.C. VI M. Plan**. Dự đoán tỷ lệ rời bỏ dịch vụ thẻ tín dụng trong ngành ngân hàng bằng các mô hình học máy [Predicting Credit Card Churn Rate in Banking Industry Using Machine Learning Models]. *Kinh Tế Dự Báo [Economy and Forecast Review]* (2025). Available online at <https://kinhtevadubao.vn/du-doan-ty-le-roi-bo-dich-vu-the-tin-dung-trong-nganh-ngan-hang-bang-cac-mo-hinh-hoc-may-31553.html>.
9. P.D. Hoang, **E.L.C. VI M. Plan**, T.H.N. Nguyen. Determinants of Non-Fungible Tokens Collection Market Activity in the Post-Pandemic Period. *Advances in Economics, Business and Management Research*. (2024). doi: 10.2991/978-94-6463-348-1_14
10. **E.L.C. VI M. Plan**, N.N. Nguyen, T.M.H. Nguyen, T.T. Pham, Q.H. Nguyen. Predicting NFT price trends using machine learning algorithms. *Journal of Finance & Accounting Research* 5(30):78-83 (2024). Available at: <https://scholar.dlu.edu.vn/thuvienso/bitstream/DLU123456789/285292/1/CVv266S05A2024078.pdf>
11. D.D. Nguyen, V.T. Tran, X.G. Nguyen, Q. H. Nguyen, **E.L.C. VI M. Plan**. Xây dựng tiêu chí trách nhiệm xã hội của doanh nghiệp trong ngành năng lượng [Creating an index to measure Corporate Social

- Responsibility in the energy industry]. *Tạp Chí Công Thương [Journal of Trade and Industry]* 154(23): 154-159 (2023).
12. Q.V. Trinh, M.K.T. Hoang, **E.L.C. VI M. Plan**. Opportunities in the development of the wood pellet industry in Vietnam. *In Evolving Global Value Chain Participation into Digital Transformation and Sustainable Development* 858-875 (2023).
 13. D. Le, L H. Le, H. Nguyen, **E. L. C. VI M. Plan**, H.-N. Tran, Nguyen D. D., and H. Phan. Reciprocity-based closed-form solutions to guided waves in multilayered structures subjected to time-harmonic excitations. *European Journal of Mechanics – A/Solids*, **102**, 105083 (2023). doi: 10.1016/j.euromechsol.2023.105083
 14. J. Picardo, **E. L. C. VI M. Plan**, and D. Vincenzi. Polymers in turbulence: stretching statistics and the role of extreme strain-rate fluctuations. *Journal of Fluid Mechanics* **969**, A24 (2023). doi: 10.1017/jfm.2023.524
 15. **E.L.C. VI M. Plan**, H. Le Thi, J. M. Yeomans, and A. Doostmohammadi. Self-sustained oscillations of active viscoelastic matter. *Journal of Physics A: Mathematical and Theoretical* **55**, 275601 (2022). doi: 10.1088/1751-8121/ac726a
 16. V.Y. Nguyen, **E. L. C. VI. M. Plan**, H.K. Pham, A.T. Nguyen, V.H. Nguyen, H. Phan. Topological structural analysis and dynamical properties in MgSiO₃ liquid under compression. *European Physical Journal B*. **95**, 62 (2022). doi: 10.1140/epjb/s10051-022-00313-0
 17. D. Le, N. A. Trinh, S.-T. Dang, **E. L. C. VI. M. Plan**, M. T. Nguyen, and H. Phan. Model of Guided Waves in Cortical Bones Coated with a Soft-Tissue Layer, in *The International Conference Series on Geotechnics* 371 – 380 (2021). doi: 10.1007/978-981-16-7160-9_37
 18. **E.L.C. VI M. Plan**, J. M. Yeomans, and A. Doostmohammadi. Activity pulses induce spontaneous flow reversals in viscoelastic environments. *Journal of the Royal Society Interface* **18**, 20210100 (2021). doi: 10.1098/rsif.2021.0100
 19. H. Nguyen, D. Le, **E. Plan**, S.T. Dang, H. Phan. Theoretical model of guided waves in a bone-mimicking plate coupled with soft-tissue layers. *Vietnam Journal of Mechanics* (2020).
 20. **E.L.C. VI M. Plan**, J. M. Yeomans, and A. Doostmohammadi. Active matter in a viscoelastic fluid. *Physical Review Fluids* **05**, 023102 (2020). doi: 10.1103/PhysRevFluids.5.023102 (Editor's suggestion)
 21. S. Musacchio, M. Cencini, **E.L.C. VI M. Plan**, and D. Vincenzi. "Enhancement of mixing by rodlike polymers". *European Physical Journal E* **41**, 84 (2018). doi: 10.1140/epje/i2018-11692-9
 22. **E.L.C. VI M. Plan**, S. Musacchio, and D. Vincenzi. "Emergence of chaos in a viscous solution of rods". *Physical Reviews E* **96**, 053108 (2018). doi: 10.1103/PhysRevE.96.053108
 23. **E.L.C. VI M. Plan**, A. Gupta, D. Vincenzi, and J. D. Gibbon. "Lyapunov dimension of elastic turbulence". *Journal of Fluid Mechanics*, **822**, R4 (2017). doi: 10.1017/jfm.2017.267. (Rapid Communications)
 24. Ali, **E.L.C. VI M. Plan**, S. S. Ray, and D. Vincenzi. "Semiflexible particles in isotropic turbulence". *Physical Review Fluids* (R) **1**, 082402 (2016). doi: 10.1103/PhysRevFluids.1.082402 (Rapid Communications)
 25. **E.L.C. VI M. Plan**, and D. Vincenzi. "Tumbling of a Brownian particle in an extensional flow". *Proceedings of the Royal Society A* **472**, 20160226 (2016). doi:
 26. **E.L.C. VI M. Plan**, A. Ali, and D. Vincenzi. "Bead-rod-spring models in random flow". *Physical Reviews E* (R) **94**, 020501 (2016). doi: 10.1103/PhysRevE.94.020501 (Rapid Communications)

Conference and Seminar Presentations

1. MATHTED 2025: 15th Biennial and International Conference, “Computational Thinking Via Bebras Tasks”, Manila, Philippines, 16-18/10/2025.
2. International Bebras Task Workshop, “Determinants of student performance in an international informatics competition”, Seoul, Korea, 17-21/5/2025.
3. International conference on applied mathematics and computer science, “Temporal considerations in the 2021 COVID-19 lockdown of Ho Chi Minh City”, Hanoi, Vietnam, 21-22/12/2024.
4. International Conference on Emerging Challenges: Smart Business and Digital Economy, “Determinants of non-fungible tokens collection market activity in the post-pandemic period”, Ninh Binh, Vietnam, 3-4/11/2023
5. Samahan ng Pisika ng Pilipinas, “Stretching in turbulent fluid regimes”, Philippines (online), 19-21/2023
6. Sab-atan 2021: International Conference on Mathematical Sciences and Applications, “Oscillatory motion arising from mismatch in relaxation timescales”, Philippines (online), 24-26/11/2021.
7. International Workshop on Mathematical Biology 2021, “Activity pulses induce spontaneous flow reversals in viscoelastic environments”, Philippines (online), 9-11/06/2021
8. Mathematical Society of the Philippines Annual Convention, “Activity pulses induce spontaneous flow reversals in viscoelastic environments”, Philippines (online), 15,22,29/05/2021
9. Vietnam Conference for Theoretical Physics, “Active matter in a viscoelastic fluid”, Vinh Phuc, Vietnam, 12-14/10/2020
10. Thang Long University Mathematics and Informatics Department Annual Workshop, “Applied mathematics in biology, physics, and health sciences”, Ninh Binh, Vietnam, 12/31-01/01/2020 (Invited Talk)
11. Mathematical Society of the Philippines Annual Convention, “What is the Intersection of Active Matter and Complex Fluids?”, General Santos, Philippines, 24-26/05/2019. (Plenary talk)
12. Workshop on Soft Matter Physics, “Active matter in a viscoelastic fluid”, Edinburgh, UK, 2019. (Poster)
13. Bio-inspired Magnetic Systems, “Emergence of chaos in a viscous solution of rods”, Exeter, UK, 9-11/07/2018. (Poster)
14. Seminar Series: Research Group on Statistical Physics of Soft Matter and Biological Systems, Technische Universität Berlin, “Elastic particles at low Reynolds”, Berlin, Germany, 2017. (Invited talk)
15. GDR Turbulence, “Emergence of chaos in rod-like polymer solutions”, Toulouse, France, 2017
16. 7ème Journée de la Physique Niçoise, “Emergence of chaos in a viscous solution of rods”, Nice, France, 2017. (Invited talk)
17. Rencontre Niçoises de Mécanique des Fluides, “Elastic particles at low Reynolds: tumbling and stretching”, Nice, France, 2017. (Invited talk)
18. COST Flowing Matter, “Lyapunov dimension of elastic turbulence”, Porto, Portugal, 2017.
19. 8th European Postgraduate Fluid Dynamics Conference, “Semi-flexible particles in isotropic turbulence”, Warsaw, Poland, 2016.

20. Ateneo de Manila University Mathematics Department Colloquium Series, “Bending and tumbling dynamics of semiflexible molecules”, Manila, Philippines, 2016. (Invited talk)
21. Rencontre non-linéaire, “Tumbling in an extensional flow”, Paris, France, 2016. (Poster)
22. COST Flowing Matter, “Tumbling in an extensional flow”, Porto, Portugal, 2016.