Scientific CV of Hông Vân Lê

Homepage: `https://users.math.cas.cz/~hvle/`

Academic training and degrees:

20.6.1983: Diplom (M.Sc.) in Mathematics, Moscow State University Lomonosov.
09.01.1987: Ph.D. in Mathematics, Moscow State University Lomonosov.
06.04.1990: Dr. Sciences, Moscow State University Lomonosov.
03.12.2009: Dr. Habilitation, University Opava.

Prizes, Awards, and Research Grants

1990: Prize of the Moscow Mathematical Society.
1991: Majorana Prize of the International Center for Theoretical Physics, Trieste, Italy.
1994-1998: Heisenberg Fellowship of the Deutsche Foschungsgemeinschaft.
2007-2010: Principal Investigator of the Grant Project Nr.100190701 of the Czech Academy of Sciences "Manifolds with special geometric structures"
2018-2020: Principal Investigator of the joint German-Czech Research Grant 18-01953J "Geometric methods of statistical learning theory and its applications".
2018-2020: Co-Principal Investigator of the Czech Grant project GACR-18-00496S "Singular spaces from special holonomy and foliations".

Academic positions since 1990

1990-1991: Researcher at the Institute of Mathematics in Hanoi
1991: Visiting mathematician at the International Centre for Theoretical Physics, ICTP, Trieste
1992-1993: Visiting mathematician at the Max-Planck-Institute for Mathematics in Bonn
1994-1997: Heisenberg fellow at the Max-Planck-Institute for Mathematics in Bonn
1997-1998: Heisenberg fellow at the Institute of Mathematics, University Leipzig
1999-2005: Research associate of the Max-Planck-Institute of Mathematics in Leipzig
Since December 2005: Scientist and then senior scientist of the Mathematical Institute of the Czech Academy of Sciences.
2007-2011: Foreign Professor of the Abdus Salam School of Mathematics. Lahore-Pakistan.
2012-2014: Visiting Professor of Vietnam National University for Sciences.
July-October 2022: Visiting Professor of the Kyoto University, Japan.

Selected Publications

(1) Curvature estimate for the volume growth of globally minimal submanifolds. *Math. Ann. 296 (1993), no. 1, 103–118.*
(2) (joint with K. Ono) Symplectic fixed points, the Calabi invariant and Novikov homology. *Topology 34 (1995), no. 1, 155–176.*
(3) (joint with J. Vanžura) Cohomology theories on locally conformal symplectic manifolds, *Asian J. of Math, Vol. 19 (2015), No. 1, pp. 45-82.*
(4) (joint with N. Ay, J. Jost, L. Schwachhöfer) Information geometry and sufficient statistics, *Probab. Theory Relat. Fields, 162(2015), 327-364.*
(5) (joint with N. Ay, J. Jost, L. Schwachhöfer) Information geometry. *Ergebnisse der Mathematik und ihrer Grenzgebiete. Springer*, 2017.
(6) (joint Y.-G. Oh, A. Tortorella and L. Vitagliano) Deformations of coisotropic submanifolds in abstract Jacobi manifolds, *J. of Symplectic Geometry, 16 (2018), 1051-1116.*
(7) (joint with D. Fiorenza, K. Kawai, L. Schwachhöfer) Almost formality of manifolds in low dimension, Ann. Sc. Norm. Super. Pisa Cl. Sci (5), vol. XXII (2021), 79-107.
(8) (joint with M. Borovoi, W. De Graaf) Classification of of real trivectors in dimension nine, *Journal of Algebra*, 603 (2022), 118-163.

Invitations to lectures, conferences and scientific visits since 2020

- June 2020, Invited lecture at the online Symposium "Categorical Probability and Statistics" originally planned as a part of the 75th Meeting of the Canadian Society of Mathematicians, Ottawa, Canada.

- July 2020, Keynote lecture at the workshop "Joint Structures and Common Foundation of Statistical Physics, Information Geometry and Inference for Learning" at the Ecole de Physique des Houches, Les Houches, France.

- September 2020, Visit of the Toulouse University III, France.

- October 2020, Keynote lecture at the Online Conference "1st International Conference on Recent Advances in Mathematics(CORAM2020)", Lahore, Pakistan.

- November 2020, Invited lecture at the Moscow Online Seminar "Differential Geometry and its Applications".

- June 2021, Invited speaker at the Online Minisymposium "Geometry defined by differential forms" at the 8-th ECM.

- September 2021, Invited speaker at the International Conference on Topology and Its Applications, Moscow, Russia.

- January 2022, Invited lecture at the Monthly Global Diffeology Seminar.

- May 2022, Invited lecture of the Conference "Mathematical Concepts in the Sciences and Humanities", Leipzig, Germany.

- July 2022, Invited lecture of the Conference "Applied Geometry for Data Sciences", Chongqing, China.

- July-October 2022, Visiting Professor of the Kyoto University, Japan.

- November 2022, Invited lecture at "Weekly Seminar of Institute for Basic Sciences, Center for Geometry and Physics", Pohang, Korea.

- January 2023, Invited lecture at the International Workshop "Lie Theory: frontiers, algorithms, and applications", Prato, Italy.

- February 2023, Invited lecture at the University of Cambridge, England.

- September 2023, Invited lecture at the International Workshop "Analysis, Geometry and Stochastics on Metric Spaces", Kyoto, Japan.

- December 2023, Invited lecture at the conference "Machine Learning, Optimization and manifods, Clermont-Ferrand, France.

- June 2024, Invited lecture at the scientific seminar of Torus Action AI company, Toulouse.

- July 2024, Invited lecture at the Special Section "Special Geometries and Physics" of the AMS-UMI International Joint Meeting 2024, Palermo.