CURRICULUM VITAE

A. Personal.

- Name : Ngo Van Thanh
- Sex : Male
- Marital status : Married
- Date of birth : December 23, 1972.
- Place of birth (city and country): Nghean, Vietnam.
- Present nationality : Vietnamese.
- Address : Institute of Physics,
  10, Daotan, Ngockhanh, Badinh, Hanoi, Vietnam.

  Tel. 84-4-37662163 ; Mobi. 84 934 667 404; E-mail: nvthanh@iop.vast.ac.vn.
- Languages: English: Good.
  French: Good.

B. Professional

I. Supervisor:

1. Prof. Nguyen Ai Viet,
   Director of Institute of Physics,
   10, Daotan, Ngockhanh, Badinh, Hanoi, Vietnam.
2. Prof. DIEP Hung The,
   Vice-President for Research, University of Cergy-Pontoise
   Director of Faculty of Sciences and Technologies,
   Director of "Laboratoire de Physique Théorique et Modélisation" (Laboratory for Theoretical Physics and Modelling),
   CNRS-University of Cergy-Pontoise (UMR 8089), France.

II. Education:

- Doctor of Sciences, (2000-2004),
  Department of Physics, Cergy-Pontoise University,
  95031 Cedex, Cergy-Pointoise, France.
  + Title of PhD thesis:
    "Properties of complex magnetic thin films: Theory and Simulation."
  + Thesis supervisor: DIEP Hung The, Prof.,
    Director of Faculty of Sciences and Technologies,
    CNRS-University of Cergy-Pontoise (UMR 8089), France.
- Master of Sciences (MS), (1996-1998), Physics Graduate School,
  Institute of Physics, Vietnam.
  + Title of MS thesis: "Theory of the interface exciton."
  + Thesis supervisor: Nguyen Ai Viet, Prof., Dr., Director IP.
- Bachelor of Sciences (BS), (1991-1995) (With honour),
  Department of physics, Hue University, Vietnam.
  + Title of BS Diploma: "Effect of of magnetic field on electron density of states in strong doped semiconductors."
  + Thesis supervisor: Dinh Van An,
    Department of Physics of Hue University, Vietnam.

III. Current position:

- Researcher of Institute of Physics.
  + Head of Computer Networking Center.

IV. Employment

+ **03/2010-03/2011** : Research fellow at National Institute for Mathematical Science, Daejeon, Korea.
+ **03/2008-09/2008** : Postdoc. at Tokyo Institute of Technology, Japan.
+ **2007** : Selected as TWAS Young Affiliate for 2007-2012.
+ **08/2006-08/2007** : Postdoc. at APCTP, Korea (2nd year).
+ **11/2004-11/2005** : Postdoc. at APCTP (Asia Pacific Center for Theoretical Physics), Korea.
+ **2000-2004** : PhD student at Cergy-Pontoise University, France.
+ **2000-present** : Researcher of Institute of Physics, Hanoi, Vietnam.
+ **1996-2000** : Researcher of Institute of Materials Science, Hanoi, Vietnam.

V. Main research fields:

- **Condensed Matter Physics**
  - Statistical physics of spin systems
  - Theory of magnetism
  - Nanosystems
  - Optical properties of semiconductor materials
  - Quantum information
- **Computer simulations**
  - Monte-Carlo simulation.
  - Molecular dynamics simulation.
  - Parallel calculations.
  - Data analysis.

C. List of publications:

Depuis 2011

1. Theory and Simulation of Magnetic Materials: Physics at Phase Frontiers
HT Diep, V Bocchetti, DT Hoang, VT Ngo
arXiv preprint arXiv:1309.4754 (2014)

2. Effect of disorder in the frustrated Ising FCC antiferromagnet: phase diagram and stretched exponential relaxation
VT Ngo, DT Hoang, HT Diep, IA Campbell
Modern Physics Letters B 28 (09) (2014)

3. Study on the Phase Transition Behavior of Fishes Schooling System
N P. The, N V. Thanh, L Sang-Hee, N Ai Viet - 2013
Communications in Physics 23 (2), 121

4. Inst. of Phys., Hanoi, Vietnam
VT Hoa, TT Thao, NV Thanh, NT Lan, NA Viet - 2012
Photonics Global Conference (PGC), 2012, 1-3

5. Van Der Waals and Casimir Interactions of Some Graphene, Material Plate and CNTs Systems
PD Anh, QK Quang, TT Thuy, VT Huong, NV Thanh, NA Viet - 2012
Communications in Physics 20 (4), 289

6. pH-Dependence of the Optical Bio-sensor Based on DNA-carbon Nanotube
VT Huong, QK Quang, TT Thuy, PD Anh, NV Thanh, NA Viet
Communications in Physics 20 (4), 309

7. On the Information Problem of DNA in the Denaturation Process
VT Ha My, VT Huong, CT Anh, TT Thao, NV Thanh, NA Viet - 2011
Communications in Physics 21 (3), 219

8. Epb Model of DNA and Thermodynamic Effective Bio Time
V Thanh Ngo, NA Viet
Modern Physics Letters B 25 (12n13), 1151-1155 - 2011

9.

V. Thanh Ngo, D. Tien Hoang and H. T. Diep,
J. Phys: Condens. Matter **23**, 226002 (2011).
"Flat energy-histogram simulation of the phase transition in an Ising fully frustrated lattice".

10. V. Thanh Ngo, D. Tien Hoang and H. T. Diep,
Mod. Phys. Lett. B 25, 929 (2011).
"Phase Transition In The Heisenberg Fully-Frustrated Simple Cubic Lattice".

11. V. Thanh Ngo and N. A. Viet,
Mod. Phys. Lett. B **25**, 1151 (2011).

12. T. A. Chu, D. T. Nga, T. T. Thao, V. Thanh Ngo and N. A. Viet,
Mod. Phys. Lett. B **25**, 979 (2011).
"Trapping Cold Atoms by a Carbon Nanotube".

13. V. Thanh Ngo, D. Tien Hoang and H. T. Diep, Phys. Rev. E **82**, 041123 (2010).

"First-order transition in the XY model on a fully frustrated simple cubic lattice".

14. Giang D. Nguyen, T. T. T. Van, V. Thanh Ngo and N.A.Viet,
Int. J. Quant. Info. Vol. **7**, No 7, 1321-1330 (2009).
"Momentum Entanglement of Photon–Exciton."
15. X. T. Pham Phu, V. Thanh Ngo and H. T. Diep, Phys. Rev. E **79**, 061106 (2009).
"Crossover from first- to second-order transition in frustrated Ising antiferromagnetic films."
16. X. T. Pham Phu, V. Thanh Ngo and H. T. Diep,
Surface Science **603**, 109 (2009).
"Critical behavior of magnetic thin films."
17. V. Thanh Ngo and H. T. Diep,
Phys. Rev. E **78**, 031119 (2008).
"Phase transition in Heisenberg stacked triangular antiferromagnets: End of a controversy."
18. V. Thanh Ngo and H. T. Diep,
J. Appl. Phys. **103**, 07C712 (2008).
"Stacked Triangular *XY* Antiferromagnets: End of a Controversial Issue on the Phase Transition."

19. V. Thanh Ngo and H. T. Diep,
J. Phys: Condens. Matter. **19**, 386202 (2007).
"Frustration Effects in Antiferrormagnetic Face-centered cubic Heisenberg Films."

20. D. L. Hien, N. T. Nhan, V. Thanh Ngo, and N. A. Viet,
Phys. Rev. E **76**, 21921 (2007) .
"Simple Model For Nonlinear Excitations in DNA."
Selected for the Vir. J. Bio. Phys. Res. 14, 147 (2007),
"Virtual Journal of Biological Physics Research", **14** (5) (Sep. 1, 2007).

21. V. Thanh Ngo and H. T. Diep,
Phys. Rev. B **75**, 035412 (2007).
"Effects of Frustrated Surface in Heisenberg Thin Films."
Selected for the Vir. J. Nan. Sci. & Tech.**15**, 126 (2007),
"Virtual Journal of Nanoscale Science & Technology", **15** (4) (Jan. 29, 2007).

22. Ngo Van Thanh and Nguyen Ai Viet,
Modern Physics Letters **B**, Vol. **20**, No. 23, 1453-1460 (2006).
"Theory of Interface Exciton with a Hole Confined in a Quantum Well."

23. Ngo Van Thanh and Nguyen Ai Viet,
Int. Journal of Modern Physics **B** Vol. **20**, No. 20, 2921-2930 (2006).
"Effects of a Strong Magnetic Field on Interface Exciton with a Hole Confined in a Quantum Well."

24. V. Thanh Ngo, H. Viet Nguyen, H. T. Diep and V. Lien Nguyen,

Phys. Rev. B **69**, 134429 (2004).
"Magnetic Properties of Exchange-Biased Three-Layer Films."

25. H. Viet Nguyen, V. Thanh Ngo, H. T. Diep, V. Lien Nguyen,
Physica B **327**, 427-430 (2003).
"Field effects on the magnetic properties of three-layers films."

26. V.T. Ngo, H.T. Diep,
J. Appl. Phys. **91**, 8399 (2002).
"Monte-Carlo study of surface-frustrated Heisenberg thin films with magneto-elastic coupling : an off-lattice model."

27. Ngo Van Thanh and Nguyen Ai Viet,
Modern Phys. Lett. **B**, Vol. **14**, 899-905 (2000).
"Simple Model for Interface Exciton with a Electron-Hole Separation in a Strong Magnetic Field."

28. Ngo Van Thanh and Nguyen Ai Viet,
Modern Phys. Lett. **B**, Vol. **12**, 887-893 (1998).
"Simple Model for Interface Exciton with a Electron-Hole Separation."

29. Ngo Van Thanh and Nguyen Ai Viet,
Proceedings of the 7th Asia Pacific Physics Conference, Beijing,
China, August 19-23, 452-454 (1997).
"Simple Model for Interface Exciton in a Strong Magnetic Field".

30. N. T. Nhung, Le Thanh Tung, Nguyen Duc Giang, N. V. Thanh and N. A. Viet,
Comm. Phys. **20**, 211-218 (2010).
"Effects of electroporation on biological membraines exposed to high potentials".

31. P. D. Anh, Q. K. Quang, T. T. Thuy, V. T. Huong, N. V. Thanh and N. A. Viet,
Comm. Phys. **20**, 289-293 (2010).
"Van Der Waals and Casimir interaction of some graphene, material plate and CNTs systems".

32. V. T. Huong, Q. K. Quang, T. T. Thuy, P. D. Anh, N. V. Thanh and N. A. Viet,
Comm. Phys. **20**, 309-317 (2010).
"pH-Dependence Of The Optical Bio-Sensor Based On Dna-Carbon Nanotube".

33. D.P. Hung, D.L. Hien, D.T. Nga, N.V. Thanh and N.A. Viet
Comm. Phys. **18**, 151-156 (2008).
"On the new type of optical bio-sensor from dna-wrapped carbon nanotubes"

34. T. T. T. Van, V. T. Hoa, N. P. Duc, N. V. Thanh and N. A. Viet
Comm. Phys. **18**, 136-140 (2008),
"Morse Effective Potential for Interaction between Two Excitons in Semiconductors".
35. N.T.L.Hoai, N.T.M. An, N. V. Thanh and N. A. Viet,

Comm. Phys. Suppl., Vietnam, Vol. **17**, 77-82, (2007).
"Avanescence State in the Fundamental Gap of Semiconductor Quantum Wells."

36. T. T. T Van, V. T. Hoa, N. P. Duc, N. V. Thanh and N. A. Viet,
Comm. Phys. Suppl., Vietnam, Vol. **17**, 97-102, (2007).
"Optical schemes for quantum computation in quantum dot molecule with different dot sizes."

37. N.T.Huyen, T.T. Nhan, N.P. Duc, N. V. Thanh, and N. A. Viet,
Comm. Phys. Suppl., Vietnam, Vol. **17**, 103-110, (2007).
"The effects of band-edge potentials in coupled-layer nano systems."

38. D. L. Hien, N. T. Nhan, N. V. Thanh, and N. A. Viet,
Accepted for publication in Proceedings of Nanophysics: from fundamentals to applications, Hanoi, Vietnam August 6-12, 2006.
"Simple Combined Model For Nonlinear Excitations in DNA Nano-Wires."

39. H. Viet Nguyen, V. Thanh Ngo, H. T. Diep, V. Lien Nguyen,
Proceedings of the International Symposium on Advanced Magnetic Materials, Halong, Vietnam, 2-4 Oct. 2002.
"Field effects on the magnetic properties of three-layers films."

40. N. V. Hieu, N. H. Son, N. V. Thanh, H. B. Thang,
Adv. Nat. Sci., Vietnam, **1**, 61 (2000).
"Quark-Antiquark Pairing Induced by Instantons in QCD".

41. Ngo Van Thanh and Nguyen Ai Viet,
Proceedings of the 23rd National Conference on Theoretical Physics,
Hochiminh City, Vietnam, July 27-30, 129-134 (1998) .
"Theory of Interface Exciton with a Hole Confined in a Quantum Well".

42. Ngo Van Thanh and Nguyen Ai Viet,
Proceedings of the 2nd Vietnamese Conference on Solid State Physics,
Doson, Haiphong, Vietnam, August 6-10, 7-12 (1997).
"Theory of Interface Exciton in a Magnetic Field".

43. Ngo Van Thanh and Nguyen Ai Viet,
Proceedings of the 22nd National Conference on Theory Physics, Doson,
Haiphong, Vietnam, August 3-5, 57-62 (1997).
"Simple Model for Interface Exciton with Electron-Hole Separation in
a Strong Magnetic Field".