

## Information on Doctoral thesis of Fellows Trinh Viet Duoc

1. Full name: Trinh Viet Duoc
2. Sex: Male
3. Date of birth: 01/09/1985
4. Place of birth: Chuong My - Hà Noi
5. Admission decision number: 3201/QĐ-SĐH dated 8/11/2010 by the President of Vietnam National University, Hanoi.
6. Changes in academic process: None
7. Official thesis title: Integral manifold and asymptotic behavior of solution of some class of evolution equation.
8. Major: Differential equation and integral
9. Code: 62460103
10. Supervisors: 1. Assoc. Prof. Dr. Nguyen Thieu Huy  
2. Assoc. Prof. Dr. Dang Dinh Chau
11. Summary of the new findings of the thesis
  - To establish a sufficient condition for the existence of stable center manifold of semi-linear differential equation.
  - To establish a sufficient condition for the existence of unstable manifold of semi-linear differential equation, unstable manifold attracts exponentially solutions of semi-linear differential equation.
  - To establish a sufficient condition for the existence of stable manifold of partial functional differential equation, solutions on the manifold attract each other exponentially.
  - To establish a sufficient condition for the existence of stable center manifold of partial functional differential equation.
  - To establish a sufficient condition for the existence of unstable manifold of partial functional differential equation, unstable manifold attracts exponentially solutions of partial functional differential equation.
12. Further research directions, if any
  - To study the existence of integral manifolds for neutral functional differential equation.
  - To study the existence of inertial manifold for semi-linear differential equation with linear part is non autonomous.

- To study the existence of integral manifolds belong to admissible class for partial functional differential equation.

13. Thesis-related publications:

- [1] N.T. Huy, T.V. Duoc (2014), "Integral manifolds for partial functional differential equations in admissible spaces on a half-line", J. Math. Anal. Appl., **411**, 816-828.
- [2] N.T. Huy, T.V. Duoc (2014), "Unstable manifolds for partial functional differential equations in admissible spaces on the whole line", Vietnam J.M., (accepted).
- [3] N.T. Huy, T.V. Duoc (2012), "Integral manifolds and their attraction property for evolution equations in admissible function spaces", Taiwanese J. Math., **16**, 963-985.
- [4] N.T. Huy, T.V. Duoc (2010), "Robustness of dichotomy of evolution equations under admissible perturbations on a half-line", International J. Evolution Equations, **3**, 57-72.