# SUMMARY OF NEW CONCLUSIONS OF PHD THESIS

Title: **The first boundary value problems without initial conditions for Schrödinger systems in nonsmooth domain**

Speciality: Integral and Differential Equations

Classification: 62.46.01.03

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## New conclusions

This thesis has studied the boundary value problem without initial condition for Schrödinger systems in domain with conical points. The main new conclusions are:

- Constructing a suitable definition of generalized solutions of the problem, then give the unique solvability of this problem and show a priori estimate of the solution.
- Investigating the smoothness of the generalized solutions of the problems with respect to both time and space variables.
- Establishing several results on the asymptotic behavior of solutions near singular points.

| **Advisor** | **PhD Student** |
|---|---|
| ***Prof. Dr. Nguyen Manh Hung*** | **Nguyen Thi Lien** |