Thesis structure: title?

1. Introduction
- ?

2. Frameworks used in thesis
A) Framework for analytical model
- Theory of superconductivity (short?)
- Andreev reflection, SN interface
- Theory of SNS junctions
- Foundations of the quasiclassical model

B) Framework for numerical model
- (Experimental setup ?)
- Tight binding model of bilayer graphene
- Random matrix theory for transport

3. Results of analytical model
- Critical current for SNS junctions
- Critical current for SNS with QPC
- Critical current for SNS with QPC and edge contribution

4. Results of numerical model
- QPC:
  - Conductance and critical current calculation
  - Effect of disorder
  - Effect of rough edges
  - Effect of finite doping in leads ?
  - Current density in sample ?
  - Zigzag vs Armchair

- Waveguide setup
  - Same as above?
  - Current density form Fourier transformation

5. Conclusion
- ?