

Topics for Mathematics 5P10 Research Project (Winter 2018)

- Finite Simple Groups (Simplicity of A_n , $n \geq 5$).
- G-sets, Group Actions and Representation of finite groups.
- Classification of Groups of Small Orders.
- Nilpotent Groups and Solvable Groups.
- Noetherian Rings and Modules.
- Jacobson Radicals.
- Modules over PID.
- Semisimple Rings.
- Clean Group Rings

Note: The project is a survey type project and it should have 10-12 pages long. You need to choose a topic and to inform me your choice within a week after receiving this handout. Feel free to discuss with me any problems regarding your research project during my office hour.