

The Department of Mathematics

2024-25-B term

Course Name Linear Algebraic Groups

Course Number 201.2.0081

Course web page

 $\verb|https://math.bgu.ac.il//en/teaching/spring2025/courses/linear-algebraic-groups||$

Lecturer Dr. Yotam Hendel, <yhendel@bgu.ac.il>, Office 113

Office Hours https://math.bgu.ac.il/en/teaching/hours

Abstract

Requirements and grading¹

Course topics

- Short review of prerequisites from algebraic geometry
- Definition, examples and first properties of linear algebraic groups
- Derivations, dffierentials and Lie algebras
- Parabolic subgroups, Borel subgroups and solvable groups
- · Weyl groups, roots and root datum
- Reductive groups and their structure
- · Advanced topics

¹Information may change during the first two weeks of the term. Please consult the webpage for updates