Department of Mathematics
College of Liberal Arts and Sciences
Iowa State University

Math 680A – Quantum Groups – Spring 2019

Course Summary

Multilinear algebra. Hopf algebras. Quantized function algebras. Quantized enveloping algebras. Modules and comodules. Yang-Baxter equation. Tensor categories. Applications to knot theory and statistical mechanics.

Main Text: C. Kassel, *Quantum Groups*, Springer Verlag.
Credits: 3
Prerequisites: Three semesters of graduate algebra is recommended.
Lectures: MW 8:00 a.m. – 9:15 a.m. in Carver 401.

Instructor

Instructor: Dr. Jonas Hartwig
Phone: (515) 294-8159
Email: jth@iastate.edu
Office: Carver 470

Office Hours:
MW 9:20am–9:50am; 11:00am–11:50am.

Examination

One problem will be assigned every lecture and solutions collected the following lecture. A partial solution gives 1 point, a complete solution 2 points.

Deadweek

Lectures and homework continue as normal during deadweek.

General Class Policies

https://math.iastate.edu/syllabus-and-class-policies/