

Preparatory Workshop Summer School 2025

Monday 04.08.2025

09:00 – 10:00	Indecomposable modules and the Krull-Remak-Schmidt theorem
10:15 – 11:15	Semisimple modules and the Jordan-Hölder theorem
11:30 – 12:30	Complex representations of finite groups
12:30 – 13:30	Lunch
13:30 – 14:30	Representation theory of symmetric groups, I: Specht modules
14:30 – 15:00	Coffee break
15:00 – 16:00	Representation theory of symmetric groups, II: Character formulas
16:15 – 17:15	Structure of finite-dimensional semisimple algebras

Tuesday 05.08.2025

09:00 – 10:00	From indecomposable projective modules to simple modules
10:15 – 11:15	From simple modules to indecomposable projective modules
11:30 – 12:30	Representations of bound quivers
12:30 – 13:30	Lunch
13:30 – 14:30	Morita-equivalence classification of finite-dimensional algebras
14:30 – 15:00	Coffee break
15:00 – 16:00	Ext and Tor
16:15 – 17:15	Extensions, quivers and blocks

Wednesday 06.08.2025

09:00 – 10:00	Schur-Weyl duality for $GL(V)$ and Schur functors
10:00 – 11:00	More on Schur-Weyl duality