

2025 AESIM school
on
Combinatorial Commutative Algebra: Theory, Computation, and Applications
April 17-23, 2025

Schedule

Course 1	Muneeba Mansha (CUI-LHR, Pakistan)	Simplicial Complexes, Posets, and Matroids	Course 5	Ahmed U. Ashraf (Uni of Toronto, Canada)	Matroids and Their Polytopes
Course 2	Volkmar Welker (Phillips University, Germany)	Monomial Ideals: Basic Properties and Relations to Simplicial Complexes, Matroids, and Posets	Course 6	Sara Faridi (Dalhousie University, Canada)	Cohen-Macaulay Properties of Monomial Ideals
Course 3	Ayesha Asloob Qureshi (Sabanci University, Turkey)	Binomial Ideals and Their Applications in Combinatorics	Course 7	Sarfraz Ahmad (CUI-LHR, Pakistan)	Polynomial Rings and Applications
Course 4	Danish Ali (IBA-KHI, Pakistan)	Homology of Simplicial Complexes, Graphs			

	Thursday 17/04/25	Friday 18/04/25	Saturday 19/04/25	Sunday 20/04/25	Monday 21/04/25	Tuesday 22/04/25	Wednesday 23/04/25
09:30 – 10:30	Opening	Course 1-2			Course 3	Course 3	Course 3
10:30 – 10:50							
10:50 – 11:50	Course 1-2	Course 1-2	Course 4	Course 4	Course 7		Course 7
11:50 – 12:00				Excursion		Tutorial 3 (11:30 – 13:00)	
12:00 – 13:00	Course 1-2	Open Discussion	Course 4		Course 5		Tutorial 5
13:00 – 14:00							
14:00 – 16:00	Tutorial 1-2 (14:00 – 16:00)		Tutorial 4 (14:00 – 16:00)			Course 5	Seminar*
		Tutorial 1-2 (14:30 – 16:30)				Tutorial 7 (14:30 – 16:30)	
15:30 – 16:30						Course 6	Course 6
16:30 – 17:30					Closing		

*A special seminar by **Dr. Abderrahim Hantoute, Universidad de Alicante, Spain** on research opportunities in Europe.

Venue: Seminar Room A-block, COMSATS University Islamabad (Lahore-Campus), Pakistan.