

10th EGYPlasma School

Arab Academy for Science, Technology & Maritime Transport, Port Said
26 April — 1 May 2025



Prof. Dr. Waleed Moslem
The British University in Egypt
Port Said University

Prof. Dr. Amr El-Zant
The British University in Egypt

Prof. Dr. Mohamed Fahmy
Arab Academy for Science,
Technology & Maritime Transport

Day 1: Saturday, 26 April 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 09:30	Opening	Waleed Moslem
09:30 – 11:00	Plasma Theory	Ibrahim Elkamash
11:00 – 12:30	Nature's Secrets: The Pathway to Plasma	Waleed Moslem
12:30 – 01:30	Coffee Break	
01:30 – 02:30	Analytical Implementation	EgyPlasma Team
02:30 – 04:00	Group Work	EgyPlasma Team
04:00 – 06:00	Lunch	
06:00 – 08:00	Ice Breaking	EgyPlasma Team
08:00 – 10:00	Open Discussion	

Day 2: Sunday, 27 April 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 10:30	Plasma Models	Ibrahim Elkamash
10:30 – 11:30	Solar Wind: Understanding Sun's Breath	Nora El-Shafeay
11:30 – 12:30	Collisional Processes in Ionospheric Plasmas: Basic Concepts	Mourad Djebli
12:30 – 01:30	Coffee Break	
01:30 – 03:00	Dusty Plasma	Waleed Moslem
03:00 – 04:00	Analytical Implementation	EgyPlasma Team
04:00 – 06:00	Lunch	
06:00 – 08:00	Group Work	EgyPlasma Team
08:00 – 10:00	Open Discussion	

Day 3: Monday, 28 April 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 10:30	Plasma Waves	Ibrahim Elkamash
10:30 – 11:30	Collisional Processes in Ionospheric Plasmas: Advanced Concepts	Mourad Djebli
11:30 – 12:30	Effective Forces in Plasma	Waleed Moslem
12:30 – 01:30	Coffee Break	
01:30 – 03:00	PIC Scheme: Laser-Plasma Interaction	Mohamed Shihab
03:00 – 04:00	Analytical Implementation	EgyPlasma Team
04:00 – 06:00	Lunch	
06:00 – 08:00	Open Tour in Port Said	
08:00 – 10:00	Open Discussion	

Day 4: Tuesday, 29 April 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 10:30	Quantum Plasma	Ibrahim Elkamash
10:30 – 12:00	Science: A Look Back and Ahead	Yasser Nour
12:00 – 01:00	Collisional Processes in Ionospheric Plasmas: Applications	Mourad Djebli
01:00 – 02:00	Coffee Break	
02:00 – 03:00	Industrial Plasma and Material Science	Mohamed Shihab
03:00 – 04:00	Fluid Turbulence: On Earth and Across the Universe	Amr El-Zant
04:00 – 06:00	Lunch	
06:00 – 08:00	Group Work	EgyPlasma Team
08:00 – 10:00	Open Discussion	

Day 5: Wednesday, 30 April 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 10:30	Research Strategy	Ibrahim Elkamash
10.30 – 11:00	Electrostatic Waves in the Venusian Ionosphere	Ahmed Gomaa
11.00 – 11:30	Machine Learning with enabling technologies for plasma physics	Shimaa Mohamed
11.30 – 12:00	Unveiling a Binary Star: New Astrometric Analysis of WDS 01497+5355 ES 761	Mohamed Elattar
12.00 – 12:30	Design and Study of Co-axial Type Electrothermal PPT Using Teflon Capillary for Satellite Engines	Marwa Mohamed
12:30 – 01:30	Coffee Break	
01.30 – 02:00	Effect of short-term treatment of CMC/Cs polymer with low-cost microwave plasma	Salma Elnahal
02.00 – 02:30	Structures of dust-ion acoustic waves in the lunar dark side induced by interaction with Earth's magnetosphere	Port Said Students
02.30 – 03:00	Leveraging the Open-Source Community in Plasma Physics Modeling: A Monte Carlo Simulator for Electron Transport	Asser Abdelalim
03.00 – 03:30	The application of stochastic processes and fractional calculus in plasma physics	Mahmoud EmadEldin
03.30 – 04:00	Generating electricity using Nickel 63 as a source for a radioactive battery	Doha El Talaty
04:00 – 06:00	Lunch	
06:00 – 08:00	Oral Exam	Waleed Moslem
08:00 – 10:00	Open Discussion	

Day 6: Thursday, 01 May 2025

Time	Program	Speaker
07:00 – 09:00	Breakfast	
09:00 – 10:30	Cosmological Plasma	Ibrahim Elkamash
10.30 – 12:00	A Brief Overview of Scientific Research	Waleed Moslem
12.00 – 12:30	Announcement of Winners & Closing Remarks	Waleed Moslem
12:30 – 01:00	Coffee Break	

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