

BIOLOGICAL CONTROL SYSTEMS 2026

Preliminary programme

14-15 September 2026 | University of Oxford

Monday 14 September 2026

TIME	SPEAKER & TITLE
09:30	Welcome & registration Maths Institute Atrium
09:50	Antonis Papachristodoulou · University of Oxford Opening comments
10:00	Yolanda Schaerli · University of Lausanne Engineering synthetic spatial patterns in bacterial populations and communities
11:00	Lucia Marucci · University of Bristol Programming cells with virtual cell models, feedback control and machine learning
11:30	Coffee Break
11:50	Arjun Khakhar · Colorado State University Developing synthetic control systems to engineer plant morphology
12:10	Noah Olsman · Harvard Medical School A Wind Tunnel for Biological Control: High-Throughput Characterization of The Design Space of Synthetic Circuits
12:40	Lunch Break
14:00	Jared Toettcher · Princeton University Title TBC
15:00	Menno van Laarhoven · TU Delft Benchmarking Identification and Control for Optogenetics in Mammalian Nucleocytoplasmic Transport
15:20	Coffee Break
15:40	Amine Ouchdiri · Mohamed VI Polytechnic University Optimal and model predictive control of Turing patterns in the engineered Nodal–Lefty reaction–diffusion system
16:00	Olivier Borkowski · INRAE & Université Paris-Saclay Title TBC
16:30	Michaëlle Mayalu · Stanford University Title TBC
17:00	Poster session & drinks
18:00	Dinner

Tuesday 15 September 2026

TIME	SPEAKER & TITLE
09:30	Diego Oyarzún · Ellison Institute of Technology <i>Mechanistic and machine learning approaches for metabolic control design</i>
10:30	Charlotte Merzbacher · Differential Bio <i>Strain-to-strain transfer learning for data-efficient media optimization in microbial fermentation</i>
10:50	Coffee Break
11:10	Industry panel Anne
12:00	Grégory Batt · Inria & Pasteur Institute <i>Cybergenetic solutions for the optimization of protein secretion in yeast</i>
12:30	Lunch Break
13:50	Elisa Franco · UCLA <i>Title TBC</i>
14:50	Torkel Loman · University of Oxford <i>Mixed positive and negative feedback loops drive diverse single-cell gene expression dynamics</i>
15:10	Coffee Break
15:30	Harrison Steel · University of Oxford <i>Control of Microbial Evolution</i>
16:00	Chelsea Hu · Texas A&M <i>Closed-Loop Optogenetic Control in Batch Culture</i>
16:30	Jean-Baptiste Lugagne · University of Oxford <i>Poster prizes & closing comments</i>
Until 5:30 PM	Poster session