

# ABS26 SCHOOL PROGRAMME

## Monday (July 6th)

Time	Session
2:00pm - 3:30pm	Lecture 1: Gaussian Process (GP) Modeling
3:30pm - 4:00pm	Coffee Break
4:00pm - 5:30pm	Lecture 2: GP Design
5:30pm - 6:30pm	Practicum 1: GP Modeling & Design

## Tuesday (July 7th)

Time	Session
9:00am - 10:30am	Lecture 3: Boundary-Informed Bayesian Modeling
10:30am - 11:00am	Coffee Break
11:00am - 12:30pm	Practicum 2: Boundary-Informed Bayesian Modeling
12:30pm - 2:00pm	Lunch
2:00pm - 3:30pm	Lecture 4: Shape-Constrained Bayesian Modeling
3:30pm - 4:00pm	Coffee Break
4:00pm - 6:00pm	Participant Talks <ol style="list-style-type: none"><li>1. Mike Baumann: Bayesian Optimization in Inverse Problems</li><li>2. Anna Ballario: Bayesian Hierarchical Modeling for Reliable Large-Scale Sensors Deployments and Applications</li><li>3. Mirko Piazzalunga, Tommaso Moretti: Surrogate Multi-Fidelity Modeling for Financial Options Pricing Using Gaussian Processes</li><li>4. Xiaoxian Ding: Sampling-based Batch Sequential Design by Stein Variational Gradient Descent</li><li>5. Ertugrul Furkan Düzenli: Data Efficient Optimization of Catalytic Reactions Using Bayesian Optimization</li><li>6. Matteo Spaziani: Bayesian machine learning for analog computation</li></ol>
8:00pm	Social dinner

## Wednesday (July 8th)

Time	Session
9:00am - 10:30am	Practicum 3: Shape-Constrained Bayesian Modeling
10:30am - 11am	Coffee Break
11:00am - 12:00pm	Lecture 5: Multi-Fidelity Bayesian Learning
12:00pm - 1:00pm	Practicum 4: Multi-Fidelity Bayesian Learning

## Thursday (July 9th)

Time	Session
9:00am - 10:30am	Lecture 6: Physics-Informed Learning
10:30am - 11:00am	Coffee Break
11:00am - 12:30pm	Practicum 5: Physics-Informed Learning
12:30pm - 2:00pm	Lunch
2:00pm - 3:30pm	Lecture 7: Data-Driven PDE Discovery
3:30pm - 4:00pm	Coffee Break
4:00pm - 5:30pm	Practicum 6: Data-Driven PDE Discovery

## Friday (July 10th)

Time	Session
9:00am - 10:30am	Lecture 8: Bayesian Active Learning & Optimization
10:30am - 11:00am	Coffee Break
11:00am - 12:30pm	Practicum 8: Lab - Bayesian Active Learning & Optimization