Program DISC Summer School

Planning, Learning and Control of Multi-Robot and Multi-Agent Systems

3 days Online + 1 day Domstad Utrecht

8th June – 11th June, 2021

Organizers: J. Alonso-Mora (TUD), O. Arslan (TU/e) and M. Cao (U. Groningen)

Tuesday 8th June 2021 [ONLINE[		**Who**	**Title**
08.45 – 9.00	Opening	Organizers	Opening Summer School - Introduction
09.00 – 10.00	Lecture	M. Dorigo	tbd
10.00 – 12.00	Lecture (w/ breaks)	JJ. Chung	Learning for MRS
12.00 – 13.00	Lunch break		
13.00 – 14.00	Short presentations	Participants	
14.00 – 14.30	Coffee-break interaction		
14.30 – 15.30	Short presentations	Participants	
15.30 – 16.00	Coffee-break interaction		
16.00 – 17.00	Lecture	D. Rus	MRS Control

Wednesday 9th June 2021 [ONLINE[		**Who**	**Title**
09.00 – 10:00	Lecture	D. Dimarogonas	Hybrid control
10.00 – 12.00	Lecture (w. breaks)	E. Montijano	Distributed consensus
12.00 – 13.00	Lunch break		
13.00 – 14.00	Lecture	B. Besselink	Performance of MAS: string stability of vehicle platoons
14.00 – 15.30	Group work		Assignment 1 by E. Montijano
15.30 – 16.30	Lecture	N Leonard	Distributed multi-agent decision-making dynamics
16.30 – 17.30	Discuss assignment 1	E. Montijano	

Thursday 10th June 2021 [ONLINE[		**Who**	**Title**
09.00 – 10:00	Lecture	S. Grammatico	Monotone game theory for multi-agent dynamical systems
10.00 – 12.00	Lecture (w. breaks)	D. Halperin	Motion planning
12.00 – 13.00	Lunch break		
13.00 – 14.00	Lecture	F. Oliehoek	Decision-making
14.00 – 15.30	Group work		Assignment 2 by D. Halperin
15.30 – 16.30	Lecture	V. Kumar	MRS Control
16.30 – 17.30	Discuss assignment 2	D. Halperin	

Friday 11th June 2021 [UTRECHT)		**Who**	**Title**
10.00 – 10:30	Arrival/check in		
10.30 – 11.30	Lecture	M. Mazo	Networked MAS
11.30 – 13.30	Lunch & interaction		
13.30 – 14.30	Lecture	Z. Sun	Distributed and cooperative coordination of multiple UAV systems
14.30 – 16.30	Discussion/interaction	all	Discussion, take aways, future, etc
16.30 – 17.00	Farewell	tbd	