

# Scientific Network

## SUNDAY, July 12th

19:00 – 21:30

*Dinner*

## MONDAY, July 13th

C 325 Curiebau (Weimarer Straße 25)	09:00 – 09:45	M. Mehrez	Modelling of nonholonomic robots
	10:00 – 10:45	M. Mehrez	Mobile robots of our lab: technical specifications & used coding environments
	10:45 – 11:15	<i>coffee break</i>	
	11:15 – 12:00	J. Pannek	MPC from a systems theory point of view
	12:15 – 13:00	J. Pannek	Implementation & algorithmical aspects of MPC
	13:00 – 14:30	<i>lunch break</i>	
	14:30 – 15:45	M. Zanon	Numerical methods; including a tutorial on the ACADO toolkit
	16:00 – 16:45	M. Mehrez	Numerical simulations & conducted experiments (videos etc.)
	16:45 – 17:30	<i>coffee &amp; cake</i>	
	17:30 – 19:00	J. Pannek	Stability proof of MPC without terminal conditions – set and trajectory based approaches

## TUESDAY, July 14th

C 325 Curiebau	08:30 – 10:00	K. Worthmann	Asymptotic stability of nonholonomic robots – a stability proof
	10:00 – 10:30	<i>coffee break</i>	
	10:30 – 11:30	<i>Discussion</i>	
	11:45 – 12:30	M. Mehrez	Observers for nonholonomic robots
	12:30 – 14:00	<i>lunch break</i>	
HU 211/212 Humboldtbbau	14:00 – 15:00	M. Zanon	Seminar on results obtained for different systems, e.g. cars or tethered airfoils
	15:00 – 15:30	<i>coffee break</i>	
	15:30 – 16:30	M. Zanon	Tuning of tracking MPC based on economic criteria
	16:30 – 17:00	<i>concluding discussion</i>	