

## TUM Summer School 2019 - Selection and Breeding

Lecturers: Bruce Walsh, University of Arizona and Guilherme Rosa, University of Wisconsin-Madison

	Tuesday June 25	Wednesday June 26	Thursday June 27	Friday June 28	Saturday June 29	Sunday June 30	Monday July 1	Tuesday July 2	
09:00 – 10:30	Arrival and Registration	Linear models	Bayesian statistics: 3	Single-trait selection in BLUP	Index selection	<free time>	GWAS	Machine learning	
10:30 – 11:00		<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>		<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>
11:00 – 12:30		Mixed models	MCMC methods: 1	BLUP extensions	Multiple-trait BLUP		G x E: 1	Machine learning	
12:30 – 13:30		<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>		<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
14:00 – 15:30		Overview Quantitative Genetics	Bayesian statistics: 1	MCMC methods: 2	Multiple-trait selection		Genomic selection: 1	G x E: 2	Machine learning
15:30 – 16:00		<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>	<i>Coffee break</i>		<i>Coffee break</i>	<i>Coffee break</i>	Departure
16:00 – 18:00		Statistics: review up to MLE	Bayesian statistics: 2	Single-trait selection	Excursion to Andechs		Genomic selection: 2	Path analysis & Bayesian network	
18:30 – 19:30		<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>			<i>Dinner</i>	<i>Dinner</i>	
19:30 – 21:00		Review of matrices	<free time>	Review and discussion			Discussion	<free time>	<free time>