

TUM Spring School 2017 Selection Theory I

Lecturer: Professor Bruce Walsh, University of Arizona

	Saturday March 25	Sunday March 26	Monday March 27	Tuesday March 28	Wednesday March 29	Thursday March 30	Friday March 31	Saturday April 1
09:00 – 10:30	Arrival and Registration	Population genetics of selection	Extensions of the breeder's equation	Review and discussion	Index selection: basics	Review, computer lab	Mixed models	Summary and additional topics
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		Using molecular data to detect selection	Changes in the genetic variance	Review of matrices	Index selection: restricted and other indices	Applications of index selection	BLUP and extensions	Wrap-up and discussion
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>
13:30 – 15:30	Welcome Set up IT	Free time	Free time	Free time	Trip to Andechs Guided tour Dinner	Free time	Free time	Departure
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>	
16:00 – 18:00	Quick review of Quantitative Genetics concepts	Using molecular data to detect selection	Changes in the environmental variance	Multivariate selection		Applications of index selection	Random regressions	
18:30 – 19:30	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>		<i>Dinner</i>	Farewell dinner	
19:30 – 20:30	Population genetics of selection	Breeder's equation	Computer lab	Problems and discussion		Review of linear models	Genomics selection	