

Università degli Studi di Padova





SUMMER COURSE 2019

"Introduction to graphical models with applications to quantitative

genetics and genomics"

Prof. Guilherme J. M. Rosa, University of Wisconsin-Madison

Prof. Francisco Peñagaricano, University of Florida-Gainesville

June 3 – 7, 2019

Department of Agronomy Food Natural resources Animals and Environment – DAFNAE University of Padova - Italy

PROGRAM

All lectures and labs will be held in room 14 at the "Mario Bonsembiante building" – Agripolis Campus

Day	Time	Session	Торіс	Instructor
Monday,	9-10:30	Lec 1	Correlation and causation	G
June 3	11-12:30	Lec 2	Matrix basics, Probability, random variables	G
	1:30-3	Lec 3	Estimation, Independence test	G
	3:30-5	Lab 1	Tests for Independence	F
Tuesday,	9-10:30	Lec 4	Path Analysis	G
June 4	11-12:30	Lec 5	Correlation networks	F
	1:30-3	Lab 2	Correlation networks	F
	3:30-5	Lec 6	Review of Mixed Models	G
Wednesday,	9-10:30	Lec 7	Introduction to SEM	G
June 5	11-12:30	Lec 8	SEM with latent variables	F
	Afternoon		Free time	
Thursday,	9-10:30	Lab 3	Structural Equation Models	F
June 6	11-12:30	Lec 9	Bayesian Networks	G
	4 00 0	1 40	BN applications: prediction and causal	0
	1:30-3	Lec 10	Interence	G
	3:30-5	Lab 4	Bayes Nets	F
Eriday	0 10.20	1 00 11	instrumental variable	C
Filuay,	9-10.00			G
Julie /	1.20.2	Lec IZ	Genetics and causal inference	
	1:30-3			
	3:30-5	Lab 6	Your data!	F