



HARMONY

Novel tools for test evaluation and
disease prevalence estimation

<https://harmony-net.eu/>



COST ACTION CA18208

Training School

“Bayesian Latent Class models for diagnostic test evaluation and true prevalence estimation”

Location: Geopolis Campus, Larissa-Trikala ring-road,
Larissa, 41500, Greece

Dates: 20-22 September 2021

This 3-day training will focus on the application of Bayesian Latent Class models for diagnostic test evaluation and true prevalence estimation. This is an interactive event with hands-on training sessions.

English is the working language of this training. Participants must have basic knowledge of the statistical language R and JAGS and have to bring their laptops.

Financial support is provided according to COST rules*

Number of participants: 25. Register at: <https://forms.gle/XxZiRNxo2NYBRSGB7> .

Last day to register: 1, September 2021.

The first eligible 25 participants will receive an official invitation from e-COST. *All physically attending participants are eligible for the reimbursement of incurred accommodation, meals, and local travel expenses in the country where the meeting takes place is paid as one item known as daily allowance. Cross-border expenses can be claimed separately in full. During the training school all participants have to sign the attendance list for each day to be considered eligible for reimbursement. The daily allowance considers the participant's travel start and end dates and hours. The daily allowance rate is determined based on the country where the event takes place [**Greece 173 EUR/day**]. No invoices for accommodation, meals, and local transport in the country where the meeting takes place are required. In the cases when the travel dates to and from the event cannot be determined, the participant shall provide any documentation attesting their travel dates so that the daily allowance can be correctly reimbursed. For those participants whose primary affiliation is in the country where the meeting takes place, if they travel less than 100 km (one way) in the country where the meeting takes place, the expense is reimbursed through the daily allowance rate and cannot be claimed separately. More information on transport expenses (car travel, airplane/train/bus/ferry travel) can be found in Sections 5, 6 of the [COST Vademecum](#).





HARMONY

Novel tools for test evaluation and disease prevalence estimation

<https://harmony-net.eu/>



COST ACTION CA18208

Date	Start	End	Speaker(s)	Title
Monday 20 September 2021				Main Auditorium
	9:00	09:15	All	Welcome and Introductions
	09:15	10:15	Polychronis Kostoulas	Introduction to Bayesian Analysis
	10:15	11:15	Eleftherios Meletis & Konstantinos Pateras	A practical introduction to MCMC (summary of pre-course work) STARD-BLCM Guidelines – Examples of proper reporting for diagnostic test evaluation
	11:15	11:45		Coffee break
	11:45	12:30	Polychronis Kostoulas	Diagnostic test evaluation with Bayesian latent class models: An overview
	12:30	13:00	Eleftherios Meletis & Konstantinos Pateras	The Hui-Walter model (Demonstration)
	13:00	14:00		Lunch Break
	14:00	15:00	All	The Hui-Walter model (Hands-on training)
	15:00	15:30	All	Day 1 Wrap-up





HARMONY

Novel tools for test evaluation and disease prevalence estimation

<https://harmony-net.eu/>



COST ACTION CA18208

Date	Start	End	Speaker(s)	Title
Tuesday 21 September 2021			Main Auditorium	
	9:00	09:45	Konstantinos Tsiamis	Review of available COVID-19 tests
	09:45	10:15	Polychronis Kostoulas	Bayesian latent class models to estimate diagnostic test accuracies of COVID-19 tests
	10:15	10:45	Coffee break	
	10:45	13:00	Eleftherios Meletis & Konstantinos Pateras	Multi-test multi-population Hui-Walter models
	13:00	14:00	Lunch Break	
	14:00	15:00	All	Multi-test multi-population Hui-Walter models (Hands-on training)
	15:00	15:30	All	Day 2 Wrap-up





HARMONY

Novel tools for test evaluation and disease prevalence estimation

<https://harmony-net.eu/>



COST ACTION CA18208

Date	Start	End	Speaker(s)	Title
Wednesday 22 September 2021				Main Auditorium
	9:00	09:30	Polychronis Kostoulas	Bayesian true prevalence estimation.
	09:30	10:00	Konstantinos Pateras	The t-Priors application I
	10:00	10:30	Konstantinos Pateras & Eleftherios Meletis	The t-Priors application II
	10:30	11:00		Coffee break
	11:00	12:30	Konstantinos Pateras & Eleftherios Meletis	The t-Priors application (Hands-on training)
	12:30	13:00	All	Day 3 Wrap-up

