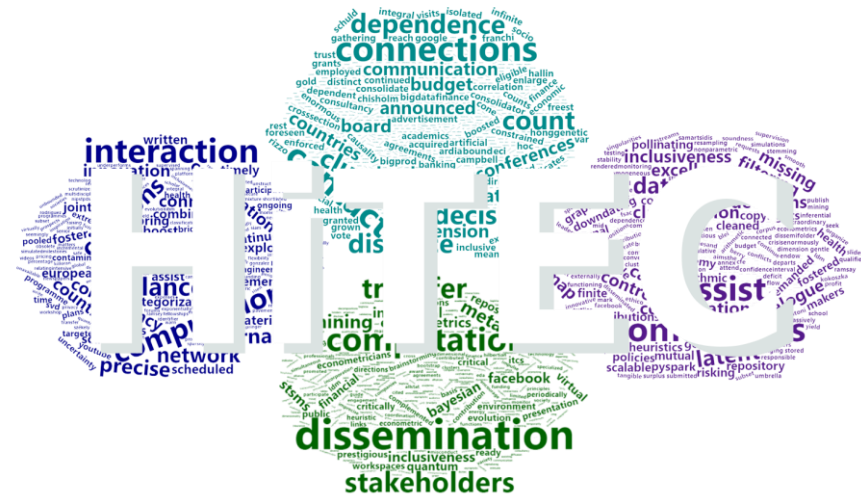




COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



HiTEc

COST Action

Summer School and Working Group Meetings

Limassol, Cyprus

7-9 July 2025



Access to the venue

- **HiTEc sessions - Location:** [CUT Tassos Papadopoulos Building](https://maps.app.goo.gl/uL6KM6snQst7YdPH9), Cyprus University of Technology, Limassol, Cyprus. (<https://maps.app.goo.gl/uL6KM6snQst7YdPH9>)
 - The HiTEc sessions will take place in Amphitheater 1 (Ground Floor), Amphitheater 2 (Ground Floor) and Lecture Room 102 (1st Floor).
 - The keynote talks will take place at Amphitheater 1 (Ground Floor).
- **Summer Course - Location:** [Continental Building](https://maps.app.goo.gl/WppZeBFKZjYG2Ep98), Cyprus University of Technology, 115 Spyrou Araouzou Street, 3036 Limassol, Cyprus. (<https://maps.app.goo.gl/WppZeBFKZjYG2Ep98>)
 - The Summer Course will take place in SOED Lecture Hall, Ground Floor.
- The coffee breaks on the 7th of July will take place School's meeting room on the 2nd floor of the Continental Building. The coffee breaks on the 8th and the 9th of July will take place in the foyer on the ground floor of [CUT Tassos Papadopoulos Building](https://maps.app.goo.gl/uL6KM6snQst7YdPH9), Athinon, Limassol 3041, Cyprus. (<https://maps.app.goo.gl/uL6KM6snQst7YdPH9>)
- The registration desk will be at the foyer of the Ground Floor of [CUT Tassos Papadopoulos Building](https://maps.app.goo.gl/uL6KM6snQst7YdPH9) (<https://maps.app.goo.gl/uL6KM6snQst7YdPH9>).

Hotel suggestions

- [Poseidonia Beach Hotel](#)

Meals suggestions

Meals are included in the registration for HiTEc members and grantees and are optional for the rest of the participants.

- Lunches will take place at [Στου Φανή](#).
- The Social dinner will take place on Tuesday 8th of July at 19:30 at [Kipriakon](#), Limassol Marina.
- The farewell Reception will take place on Wednesday, the 9th of July 2025 at 19:30 at the [Poseidonia Beach Hotel](#).



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Hybrid Sessions – Zoom Links

Summer course: <https://us06web.zoom.us/j/84966133164>

Amphitheater 1: <https://us06web.zoom.us/j/86304919552>

Amphitheater 2: <https://us06web.zoom.us/j/81696100826>

Lecture Room 102: <https://us06web.zoom.us/j/83365758529>

Zoom passwords

Password for summer course/lectures: 251701

Wifi

CUTEVENTS

Password: Tpk1234!

HiTEc Summer Course

- The Spring Course will take place in the **SOED Lecture Hall, Ground Floor.**
- You can find more information on the different modules at <https://www.hitecaction.org/limassol2025course.php>

Schedule

Monday, 7 July 2025

09:00 - 10:30 – Session 1.1 - Module I

10:30 - 11:00 – Coffee break

11:00 - 12:30 – Session 1.2 - Module I

12:30 - 14:00 – Lunch break

14:00 - 15:30 – Session 1.3 - Module I

15:30 - 16:00 – Coffee break

16:00 - 17:30 – Session 1.4 - Module I



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Tuesday, 8 July 2025

09:00 - 10:30 – Session 1.5 - Module I
10:30 - 11:00 – Coffee break
11:00 - 12:30 – Session 1.6 - Module I
12:30 - 14:00 – Lunch break
14:00 - 15:30 – Session 1.7 - Module I
15:30 - 16:00 – Coffee break
16:00 - 17:30 – Session 1.8 - Module I

Wednesday, 9 July 2025

09:00 - 10:30 – Session 2.1 - Module II
10:30 - 11:00 – Coffee break
11:00 - 12:30 – Session 2.2 - Module II
12:30 - 14:00 – Lunch break
14:00 – 16:00 – Session 2.3 - Module II
16:00 - 16:30 – Coffee break
16:30 – 18:30 – Session 2.4 - Module II

HiTEc Working Groups Meetings

Schedule

Tuesday 08.07.2025

09:30 - 10:20 – Keynote talk I: Consistent estimation of linear regression models from different data sources with many variables in common (WG1, WG2)
10:50 - 12:30 – Session HI002: HiTEc session: High-dimensional and complex data (WG2, WG3)
– Session HO005: Applied econometrics and ML in economic institutions (WG2, WG3)
– Session HO018: Recent advances in complex data analysis (WG1, WG2)
14:00 - 15:40 – Session HO006: Complex research designs (WG1, WG2)



- Session HO011: Advances in statistics and financial econometrics (WG2)
- Session HO015: Machine learning for high dimension time series (WG2, WG3)

- 16:10 - 17:25 – Session HO009: Topics in financial econometrics (WG2)
- Session HO012: High-dimensional probability and machine learning (WG3)
 - Session HO019: Bayesian methods, decision-making, and experimental designs (WG1, WG2)
- 17:35 – 18:25 – Keynote talk II: The environmental impact of green bonds: Data-driven insights through statistical learning (WG2, WG5)

Wednesday 09.07.2025

- 09:05 - 10:20 – Session HI023: HiTEc session: Bayesian methods and text mining (WG1)
- Session HO021: Advanced statistical tools in risk management (WG2)
- 10:50 - 12:30 – Session HI046: HiTEc session: Econometrics and machine learning (WG2, WG3)
- Session HO014: Recent developments in hypothesis testing (WG2)
 - Session HO010: Statistical methods for complex data structures (WG1, WG2)
- 14:00 - 15:40 – Session HI045: HiTEc session: Nonparametric and functional-based methods (WG2)
- Session HO016: Statistics for corporate sustainability and financial resilience (WG5)
 - Session HO003: Dimension reduction (WG3)
- 16:10 - 17:25 – Session HC028: Econometric theory (WG2)
- Session HC030: Applied statistics and econometrics (WG2, WG5)
- 17:35 – 18:25 – Keynote talk III: Detection of chaotic behaviors in stochastic systems by dispersion ratios in local block Lyapunov exponents diagrams (WG2)



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Detailed Scientific Programme

Please see the the Detailed Scientific Programme and BoA at
<https://www.cmstatistics.org/hiteccodes2025/programme.php>

KEYNOTE TALKS (UTC+3)

Keynote talk I	Tuesday 08.7.2025	09:30 - 10:20	Room: Amphitheater 1
Consistent estimation of linear regression models from different data sources with many variables in common			
Speaker: M. Hirukawa			Chair: Erricos Kontoghiorghe

Keynote talk II	Tuesday 08.7.2025	17:35 - 18:25	Room: Amphitheater 1
The environmental impact of green bonds: Data-driven insights through statistical learning			
Speaker: C. Erlwein-Sayer			Chair: Demetris Koursaros

Keynote talk III	Wednesday 09.7.2025	17:35 - 18:25	Room: Amphitheater 1
Detection of chaotic behaviors in stochastic systems by dispersion ratios in local block Lyapunov exponents diagrams			
Speaker: Y. Liu	Co-authors: R. Ichiya, R. Sagawa	Chair: Ana Colubi	

PARALLEL SESSIONS (UTC+3)

Tuesday 08.07.2025

Parallel session B: HiTECCoDES2025	Tuesday 08.7.2025	10:50 - 12:30
Session HI002	Room: Amphitheater 1	
HiTEc session: High-dimensional and complex data	Tuesday 08.7.2025 10:50 - 12:30	
Chair: Enea Bongiorno	Organizer: COST Action HiTEc	
HI0162: W. Wang Low-rank and sparse network regression HV0198: A. Munteanu, H.C. Lie On data subsampling for Poisson regression HI0174: V. Batagelj Drilling into Erasmus learning mobility flows between countries 2014-2024 HO0165: D. Weston Estimating differential entropy in high dimensional spaces		
Session HO005	Room: Amphitheater 2	
Applied econometrics and ML in economic institutions	Tuesday 08.7.2025	10:50 - 12:30
Chair: Daria Scacciatelli	Organizer: Daria Scacciatelli	
HO0207: A. Rollin, M. Berta, L. Rinaldi, C.E. De Marco, M. Bondarenko, S. DAndrea, F. Valeria, V. Macaudo, D. Scacciatelli, S. Greco, S. Monaco, S. Lo Sardo, D. Apiletti, T. Cerquitelli Measuring economic sentiment in italian news HO0201: E. Cangiano, A. Rollin, D. Scacciatelli Forecasting Italian firms' default probability using Prophet: A cycle-informed approach HO0210: V. Macaudo, C. Tegami ITFIN: A stock-flow consistent model for the Italian economy		



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY
Funded by
the European Union

HO0200: S. DAndrea, S. DAndrea, G. Di Bartolomeo, P. DiImperio, G. Infantino, M. Meacci

The macroeconomic impact of structural reforms: The case of Italy

Session HO018

Recent advances in complex data analysis

Chair: Bojana Milosevic

Room: Lecture room 102

Tuesday 08.7.2025 10:50 - 12:30

Organizer: Bojana Milosevic

HO0209: A. Ramdas

Conformal changepoint localization

HO0211: D. Bodenham

Efficient offline nonparametric changepoint detection for univariate data

HO0202: B. Milosevic, D. Aleksic

Energy-distance-based two-sample testing in the presence of incomplete data

HO0199: A. Srakar

Parking on random spanning tree in a Hilbert space with applications to tree-based machine learning

Parallel session C: HiTECCoDES2025

Tuesday 08.7.2025

14:00 - 15:40

Session HO006

Complex research designs

Chair: Kalliopi Mylona

Room: Amphitheater 2

Tuesday 08.7.2025 14:00 - 15:40

Organizer: Kalliopi Mylona

HO0178: M. Borrotti

Beyond the Pareto Front: A TOPSIS-Based Framework for multi-criteria design with the multiDoE R Package

HO0186: Y. Englezou, S. Timotheou, C. Panayiotou

Bayesian design of experiments for unmanned aerial vehicles path planning

HO0214: R. Mitra

Optimized recovery sampling to test for missing not at random

HO0185: T. Ladas, C. May, K. Mylona, D. Pigoli

NeuroBaves Design Optimizer (NBDO) for high-dimensional settings

Session HO011

Advances in statistics and financial econometrics

Chair: Sandra Paterlini

Room: Lecture room 102

Tuesday 08.7.2025 14:00 - 15:40

Organizer: Sandra Paterlini

HO0181: K. Bax, A. Cehajic

The role of biodiversity risk in shaping bank lending decisions

HO0218: D. Maringer, S. Paterlini

Improving index tracking and portfolio performance with regularization

HO0220: M. Bogdan, A. Chojecki, I. Hejny, B. Kolodziejek, J. Wallin

Recovering network hubs with PCGLASSO: Theory, algorithm, and performance

HO0155: S. Paterlini, A. Fulci, E. Taufer

An l0-constrained and l1-regularized estimator for graphical models

Session HO015

Machine learning for high dimension time series

Chair: Weining Wang

Room: Amphitheater 1

Tuesday 08.7.2025 14:00 - 15:40

Organizer: Weining Wang

HO0154: C. Lam, Z. Cen

Matrix-valued factor model with time-varying main effects

HO0164: R.-B. Chen

A modified VAR-deGARCH model for asynchronous multivariate financial time series via variational Bayesian inference

HO0189: C. Huang, V. Chernozhukov, I. Fernandez-Val, W. Wang

Arellano-Bond LASSO estimator for dynamic linear panel models

HO0212: Y. He, B. Zhang

Testing for spurious factor analysis on high dimensional nonstationary time series



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY
Funded by
the European Union

Parallel session D: HiTECCoDES2025	Tuesday 08.7.2025	16:10 - 17:25
Session HO009		Room: Amphitheater 1
Topics in financial econometrics	Tuesday 08.7.2025	16:10 - 17:25
Chair: Leopold Soegner		Organizer: Leopold Soegner
HO0153: M. Ertl, R. Kunst, A. Wende On the influence of the choice of seasonal adjustment method on forecasting national accounts aggregates across the EU HO0166: L. Soegner, M. Wagner Online breakpoint-detection in cointegrating relationships HO0192: M. Abdollahi Monitoring structural breaks in vector autoregressive models		
Session HO012	Room: Lecture room 102	
High-dimensional probability and machine learning	Tuesday 08.7.2025	16:10 - 17:25
Chair: Andrej Srakar	Organizer: Andrej Srakar	
HO0213: Y. Zhang Spectral estimators for multi-index models HO0216: F. Benning, L. Doering Gradient span algorithms make predictable progress in high dimension HC0222: F. Maturo, A. Porreca Partial dependence and functional principal component-based reconstruction for explainable functional random forests		
Session HO019	Room: Amphitheater 2	
Bayesian methods, decision-making, and experimental designs	Tuesday 08.7.2025	16:10 - 17:25
Chair: Matteo Borrotti	Organizer: Matteo Borrotti	
HO0172: F. Pavesi, A. Candelieri Bayesian optimization on the space of symmetric positive definite matrices HO0176: V. Zangirolami, M. Borrotti, A. Candelieri Conformal prediction for safe decision-making HO0182: K. Mylona, C. May, T. Ladas, D. Pigoli Optimal experimental designs for function-on-function linear models		

Wednesday 09.07.2025

Parallel session F: HiTECCoDES2025	Wednesday	09:05 - 10:20
	09.7.2025	
Session HI023		Room: Amphitheater 1
HiTEc session: Bayesian methods and text mining	Wednesday 09.7.2025	09:05 - 10:20
Chair: Bernardo Nipoti		Organizer: COST Action HiTEc
HI0183: L. Kontoghiorghe, A. Colubi, G. Kapetanios Evolution of prevalence and dominance of HiTEc topics HI0191: A. Staszewska-Bystrova, V. Naboka-Krell, V. Bystrov, P. Winker Sampling uncertainty of research topics		
Session HO021	Room: Amphitheater 2	
Advanced statistical tools in risk management	Wednesday 09.7.2025	09:05 - 10:20
Chair: Massimiliano Caporin	Organizer: Massimiliano Caporin, Alessandra Amendola	
HO0159: M. Caporin, M. Billio, S. Paterlini, R. Yang Optimizing portfolios through ESG risk budgeting HO0160: L. Garcia-Jorcano, M. Caporin, J.-A. Jimenez-Martin Diversifying risk parity portfolios with high-frequency principal components		



COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY
Funded by
the European Union

HO0173: V. Candila, O. Cepni, G. Gallo, R. Gupta

The role of local and global economic policy uncertainty in GARCH-MIDAS forecasts of US state-level volatility

Parallel session G: HiTECCoDES2025		Wednesday 09.7.2025	10:50 - 12:30
Session HI046		Room: Amphitheater 1	
HiTEc session: Econometrics and machine learning		Wednesday 09.7.2025 10:50 - 12:30	
Chair: Christina Erlwein-Sayer		Organizer: COST Action HiTEc	
HI0157: T. Tsenova Enhancing economic forecasts through Hilbert space projection methods			
HI0215: A. Petukhina, A. Tetereva Advancing Markowitz: Asset allocation forest			
HI0223: R. Alzbutas, V. Abraskeviciute, A. Kybartaitė-Ziliene, G. Alzbutiene Statistical methods and supervised-unsupervised machine learning for EEG signal analysis and detection of brain injury			
HI0225: K. Maennasoo, K. Kepp Explaining switching behavior: Consumer attention and choice in car insurance market			
Session HO014		Room: Lecture room 102	
Recent developments in hypothesis testing		Wednesday 09.7.2025 10:50 - 12:30	
Chair: Marija Cuparic		Organizer: Marija Cuparic	
HO0193: N. Villanueva Comparison of k regression curves in R using a new R package			
HO0203: M. Cuparic, D. Bucalo Jelic, B. Milosevic Independence testing for mixed-type data using distributional transformations			
HO0206: D. Gaigall, J. Gerstenberg On resampling tests and the nested simulation problem			
HO0208: M. Obradovic, K. Halaj, B. Milosevic A new class of goodness-of-fit tests using weighted degenerate U-statistics			
Session HO010		Room: Amphitheater 2	
Statistical methods for complex data structures		Wednesday 09.7.2025 10:50 - 12:30	
Chair: Maria Brigida Ferraro		Organizer: Maria Brigida Ferraro	
HO0167: A. Lopez Oriona, Y. Sun, J. Vilar Clustering locally stationary time series using quantile autocorrelations			
HO0177: P. Giordani Clustering models for multi-view data			
HO0180: M. Cremona, J. Di Iorio, F. Chiaromonte funBAlign: A hierarchical algorithm for functional motif discovery			
HO0196: J. Grana Colubi, G. Gonzalez-Rodriguez, A.B. Ramos-Guajardo Estimation of a simple linear regression model for random star-shaped sets			



COST Action HiTEC
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Parallel session H: HiTECCoDES2025	Wednesday 09.7.2025	14:00 - 15:40
Session HI045		Room: Amphitheater 1
HiTEC session: Nonparametric and functional-based methods	Wednesday 09.7.2025	14:00 - 15:40
Chair: Matus Maciak		Organizer: COST Action HiTEC
HI0224: A. Bathke Combining nonparametric functionals for more effective decision-making and inference		
HI0205: M. Maciak Functional profile completion: An R package		
HI0179: E. Bongiorno, A. Goia, K.L.L. Chan Functional shape outliers as contamination in complexity mixtures		
HV0197: A.B. Ramos-Guajardo, M.B. Ferraro, G. Gonzalez-Rodriguez Generalization of the Mahalanobis distance for star-shaped sets: An application to fuzzy clustering		
Session HO016	Room: Lecture room 102	
Statistics for corporate sustainability and financial resilience	Wednesday 09.7.2025	14:00 - 15:40
Chair: Alessandra Amendola	Organizer: Marialuisa Restaino, Alessandra Amendola	
HO0169: A. Stephan, M. Sahamkhadam Multiobjective optimization of ESG bond portfolios: A copula-based dynamic Nelson-Siegel approach		
HO0175: A. Amendola, P. Giudici, A.E. Bernardelli Measuring inequality in the adoption of ESG scores by small and medium enterprises		
HO0190: M. Restaino, M. La Rocca, M. Niglio, S. Mphaya Structural patterns and country effects in global ESG performance		
HO0194: C. Liberati, C. Bottai, L. Crosato Predicting bankruptcy of micro-enterprises by industry: Integrating financial and web-based indicators		
Session HO003	Room: Amphitheater 2	
Dimension reduction	Wednesday 09.7.2025	14:00 - 15:40
Chair: Andreas Artemiou	Organizer: Andreas Artemiou	
HO0158: E. Christou, E. Solea, S. Wang, J. Song Sufficient dimension reduction for the conditional quantiles of functional data		
HO0184: E. Solea Robust inverse regression for multivariate elliptical functional data		
HO0195: A. Alqarni Robust sufficient dimension reduction for multivariate time series analysis		
HC0156: H. Rika, D. Vilenchik, J. Lee, J. Lee Unveiling the latent space: Dimension reduction for concepts discovery in GNN-based combinatorial optimization		

Parallel session I: HiTECCoDES2025	Wednesday 09.7.2025	16:10 - 17:25
Session HC028		Room: Amphitheater 1
Econometric theory	Wednesday 09.7.2025	16:10 - 17:25
Chair: Masayuki Hirukawa		Organizer: COST Action HiTEC
HC0221: J.M. Rodriguez-Poo, A. Soberon, S. Sperlich Inference on panel data models with a generalized factor structure		
HV0219: A. Soberon, D. Henderson, J.M. Rodriguez-Poo, T. Wang Estimation of functional coefficient panel data models with endogenous selectivity and fixed effects		



COST Action HiTeC
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



HV0170: S. Halkiewicz

NA-DiD: Extending Difference-in-Differences with capabilities

Session HC030

Applied statistics and econometrics

Chair: Maria Brigida Ferraro

Room: Amphitheater 2

Wednesday 09.7.2025 16:10 - 17:25

Organizer: COST Action HiTeC

HC0217: R. Seymour

A partially pooled Bayesian hierarchical model for aggregated relational survey data

HC0226: D. Koursaros

Financial literacy and advice: Substitutes or complements

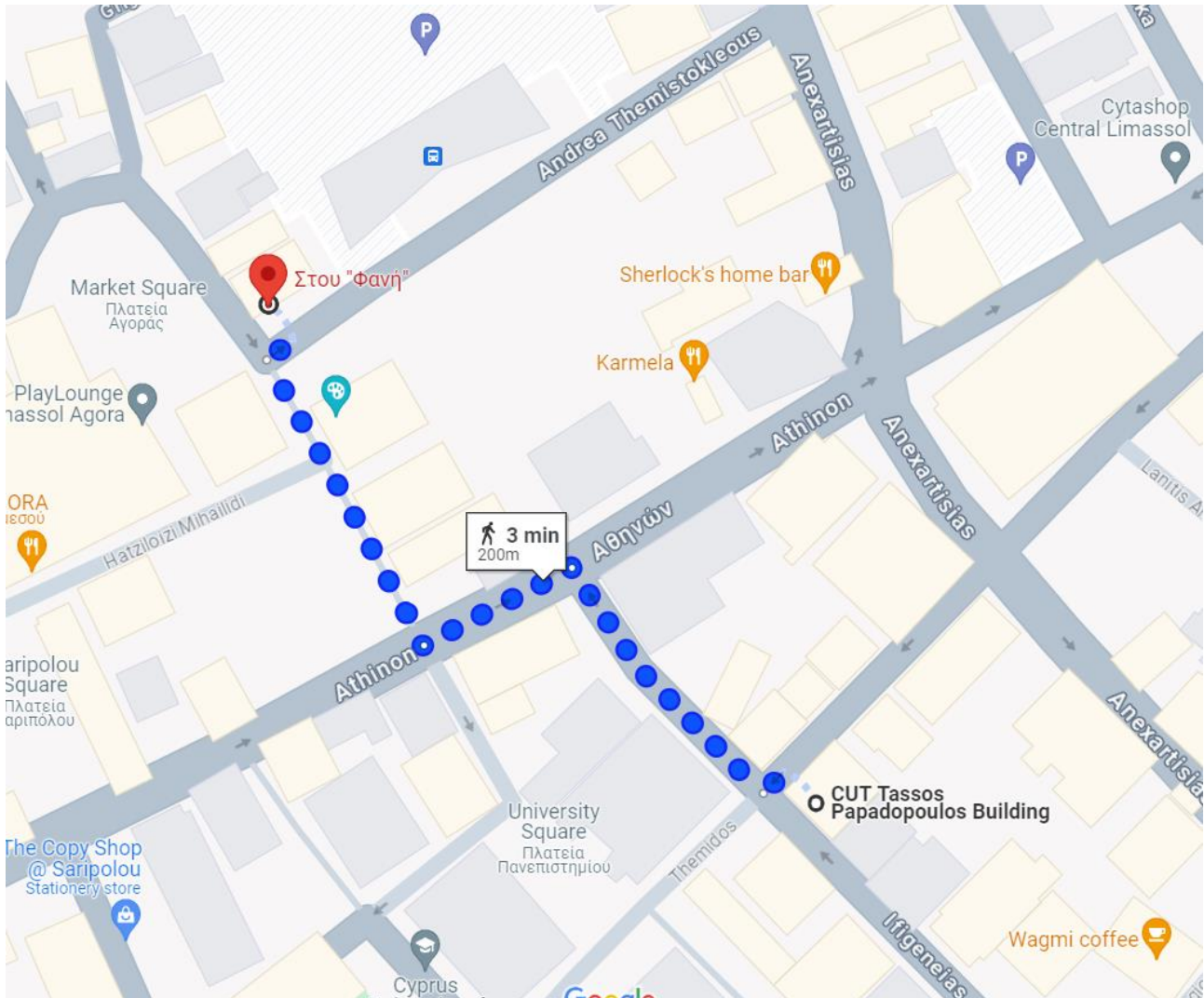


COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



MAPS

Lunch – Στου Φανή

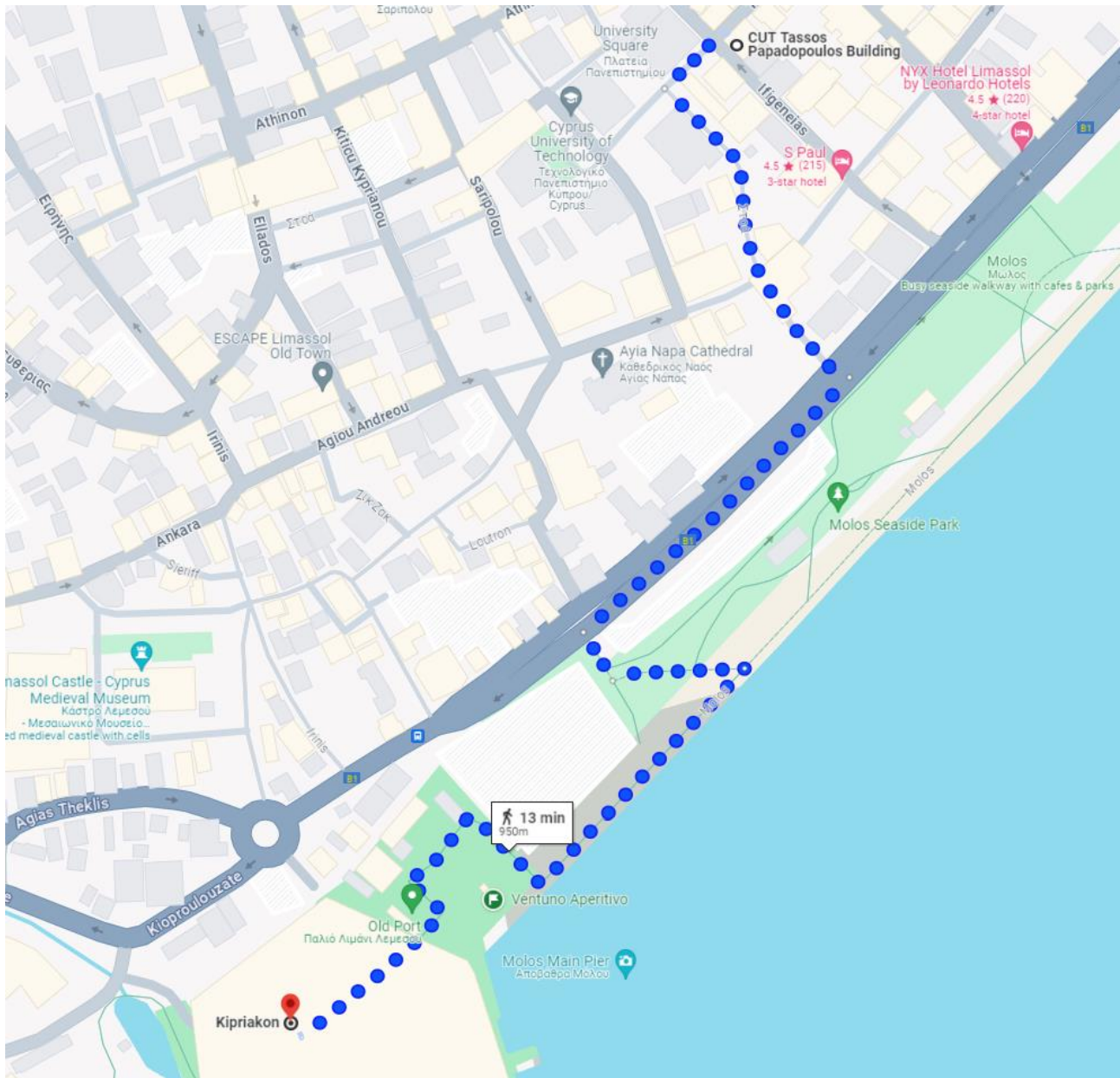




COST Action HiTEc
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Dinner – Kipriakon





COST Action HiTEC
Text, functional and other
high-dimensional data in econometrics:
New models, methods, applications



Farewell Reception – Poseidonia Beach Hotel

← from CUT Tassos Papadopoulos Building, Themidos 1, Limassol 3036, Cyprus
to Poseidonia Beach Hotel, B1 25 Amathus Aven...

24 min (12.3 km)

via B1

Fastest route now due to traffic conditions

CUT Tassos Papadopoulos Building
Themidos 1, Limassol 3036, Cyprus

➤ Take Ανεξαρτησίας to Χριστόδουλου
Χ" Παύλου/B1

2 min (400 m)

← Turn left onto Χριστόδουλου Χ" Παύλου/B1
📍 [Continue to follow B1](#)

9 min (3.6 km)

➤ Get on A1 from Παναγιώτη Τσαγγάρη and
Σπύρου Κυπριανού

6 min (3.7 km)

➤ Continue on A1. Drive to Αμαθούντος/B1 in Άγιος
Τύχων

6 min (4.5 km)

Poseidonia Beach Hotel

B1 25 Amathus Avenue, Agios Tychon, Cyprus

