

## CURRICULUM VITAE

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### **Education:**

2017- 2022	PhD in Mathematics, Department of Statistics and Operational Research, School of Mathematics, Faculty of Sciences, Aristotle University of Thessaloniki
2015-2017	Msc in Mathematics, Specialization in Statistics and Modeling, School of Mathematics, Faculty of Sciences, Aristotle University of Thessaloniki
2011-2015:	Bachelor's degree in Mathematics, School of Mathematics, Faculty of Sciences, Aristotle University of Thessaloniki

### **Research activities**

- Stochastic Modeling
- Stochastic processes
- Hidden Markov Models
- Statistical Seismology

### **Teaching Experience**

Spring 2021	Teaching assistant in “Probability Theory II”, Department of Mathematics AUTH
Spring 2019	Teaching assistant in “Statistics Laboratory”, Department of Mathematics AUTH (Voluntary)
Spring 2014	Undergraduate teaching assistant in “Algebraic Structures”, Department of Mathematics, AUTH (Voluntary)
Fall 2013	Undergraduate teaching assistant in “Introduction to Algebra”, Department of Mathematics, AUTH (Voluntary)

### **Publications**

- Lykou , R. and Tsaklidis , G. (2021). Filtering a hidden Homogeneous Markov system. 33rd Panhellenic Statistics Conference Proceedings, 23-26 September 2021, Larissa, Greece. (In Greek)
- Lykou , R. and Tsaklidis , G. (2021). Particle Filtering: A priori estimation of observational errors of a state-space model with linear observation equation. (An extension to the corresponding proceedings). Mathematics.
- Lykou, R., Tsaklidis, G., Papadimitriou, E. (2020), Change point analysis on the Corinth Gulf (Greece) seismicity, Physica A: Statistical Mechanics and its Applications, 541, 123630
- Lykou, R., and Tsaklidis, G (2020). A priori estimation methodology on observation errors of a state space model with linear observation equation using Particle Filtering, 6<sup>th</sup> SMTDA Conference Proceedings, 2-5 June 2020, Barcelona, Spain.

- Lykou, R., and Tsaklidis, G (2019). A priori estimation of observation errors of Particle Filter. 32nd Panhellenic Statistics Conference Proceedings, 30 May-1 June 2019, Ioannina, Greece. (In Greek)

### **Books**

- Lykou, R. and Tsaklidis, G. (2021). Change Point Detection Techniques on Seismicity Models. In Statistical Methods and Modeling of Seismogenesis (eds N. Limnios, E. Papadimitriou and G. Tsaklidis). <https://doi.org/10.1002/9781119825050.ch10>
- Moysis, L., Tsikalopoulou, M., Diamantidis, D., Lykou, R., Bougiouka, G., Tsaousidou, M., Tsolakis, C., Tsaparis, T., Papatheodorou, D., 2014. Introduction to LaTeX for students (Greek version)

### **Participation in Conferences – Scientific Meetings-Talks**

1. Lykou, R., and Tsaklidis, G. (2019). Particle filter impoverishment under an urn model perspective, Applied Stochastic Models and Data Analysis, Florence.
2. Lykou, R., and Papadimitriou, E. (2019). Change point analysis on the interevent time between successive earthquakes in the region of Ionian Islands during the time period 1970-2018, 32nd Panhellenic Statistics Conference, Ioannina.
3. Lykou, R., and Tsaklidis, G., 2018. A particle filter at low computational cost. 9th International Workshop On Applied Probability, Budapest.
4. Lykou, R., Tsaklidis, G., Papadimitriou, E. 2018. Change point analysis on seismic sequences of gulf of Corinth. 5th Stochastic Modeling Techniques and Data Analysis International Conference, Chania.
5. Lykou, R., Tsaklidis, G., and Papadimitriou, E., 2018. Change point analysis on seismic sequences of Ionian Islands. 31<sup>st</sup> meeting of the Hellenic Statistical Institute, Lamia
6. Lykou, R., Mpairami, M., Nastou, D., and Tsikalopoulou, M., 2016. Study on the performance of graduates in the School of Mathematics of the Aristotle University of Thessaloniki from 1992 to 2015. 29<sup>th</sup> meeting of the Hellenic Statistical Institute, Thessaloniki-Naoussa.
7. Lykou, R., and Tsikalopoulou, M., 2015. Power-law distributions and applications on empirical data. 32<sup>nd</sup> Panhellenic Conference on Mathematics Education, Kastoria.