Ali Seif

Id: 3950399259

Date of birth: 10/10/1996

Personal phone: +989367764694

University Email: a.seif@iasbs.ac.ir

Personal Email: a.seif.iasbs@gmail.com

Continuous PhD in Physics

8th year PhD track student in physics (the last year of PhD) at Institute for Advanced Studies in Basic Sciences, Zanjan, Iran (IASBS) university, Academic orientation in the field of complex systems and computational neuroscience, Research on the synchronization of brain network and synchronization of complex networks with time delay. My doctoral thesis is about "Investigating dynamics and structure of adaptive networks in presence of the frustration parameter and time delay".

Education

2014–present — Continuous PhD, Institute for Advanced Studies in Basic Sciences , Zanjan.

Projects

2021–present — Investigating dynamics and structure of adaptive networks in presence of the frustration parameter and time delay (PhD Thesis Under the supervision of Dr M. Zarei)

2019 — Investigating how to detect odors in the brain humans using EEG and fNIRS devices (Under the supervision of Dr Shima T Moein IPM Institute For Research In Fundamental Sciences-Research Institute of Cognitive Sciences)

2017 — Investigation of sand grain particles and observation of patterns by proving the wave nature of large grain particles (Under the supervision of Prof. Yousef Sobouti)

PhD courses

- Neuroscience, exploring the brain (Bear, Mark F,...) (supervision of Dr. Zarei)
- An Introduction to Modeling Neuronal Dynamics (Christoph Börgers) (supervision of Dr. Valizadeh)
- Nonlinear dynamics and chaos (Steven H. Strogatz) (supervision of Dr. Azimi)
- Introduction to the Theory of Complex Systems (Stefan Thurner,...) (supervision of Dr. Nedaei)
- Econophysics and Data Driven Modelling of Market Dynamics (Frédéric Abergel ,...) (supervision of Dr. Nedaei)
- Elements of information theory (Thomas M. Cover) (supervision of Dr. Nedaei)
- Network Science (Albert-László Barabási) (supervision of Dr. Azimi)

Relevant skills and experiences

Computer skills

Programming languages and Scientific software:

C++	Excellent
Python	Excellent
MATLAB	Excellent
Mathematica	Very Good

Applications:

Arduino	Excellent
3D Max	Excellent
Photoshop	Excellent
Nextion	Very Good

Langoages

Persian	Native language
English	Good

Teaching

- **2016** Teaching Assistant in Mechanics Laboratory Physics (Dr F. Hajizade)
- **2020** Teaching Assistant in Computational Physics (Dr E. Nedaei)
- **2021** Teaching Assistant in Modeling Neuronal Dynamics (Dr M. Zarei)
- **2022** Teaching Assistant in Computational Physics (Dr B. Farnoodi)

Certification

- **2017** TMU-ICTP School and Conference on Dynamical Systems and Ergodic Theory | (smr 3200)
- **2020** 14rd EEG Signal Processing, Analysis and Processing Workshop in National Brain Mapping Lab
- **2021** Spring College on the Physics of Complex Systems | (smr 3556)
- **2021** ICTP-ICTS Winter School on Quantitative Systems Biology