

# CURRICULUM VITAE

## Alhun Aydın



Assistant Professor of Physics at Sabancı University  
and Associate at Harvard University

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### EMPLOYMENT

- 09/2023 – Present : *Assistant Professor*, Faculty of Engineering and Natural Sciences (FENS), **Sabancı University**, Turkey  
Founder & Group Leader at Quantum Energy Research Group
- 09/2022 – Present : *Associate*, Department of Physics, **Harvard University**, USA  
Heller Group Collaboration
- 09/2022 – 09/2023 : *Postdoctoral Researcher*, Department of Physics, **Koç University**, Turkey  
Quantum Enabling System Technologies (QuEST) Team, *PI*: Ozgur E. Mustecaplioglu
- 09/2020 – 09/2022 : *Postdoctoral Fellow*, Department of Chemistry & Chemical Biology, **Harvard University**, USA  
Heller Group, *PI*: Eric J. Heller
- 03/2019 – 06/2019 : *Visiting Research Fellow*, Institute of Chemistry, **Hebrew University of Jerusalem**, Israel  
Fritz Haber Research Center for Molecular Dynamics, *Supervisor*: Ronnie Kosloff
- 09/2018 – 09/2020 : *Co-Founder*, NIDLE Teknoloji Ltd., Turkey (A blockchain-utility startup)
- 06/2018 – 03/2019 : *Guest Doctoral Student*, Department of Physics & Astronomy, **Uppsala University**, Sweden  
Materials Theory Division, Non-Equilibrium Nano-Physics, *Supervisor*: Jonas Fransson
- 04/2013 – 09/2020 : *Research Assistant*, Energy Institute, **Istanbul Technical University** (ITU), Turkey  
Nano Energy Research Group (joined in 10/2012)

### EDUCATION

- 07/2014 – 09/2020 : **PhD** in *Energy Science & Technology*, Energy Institute, Istanbul Technical University  
Ph.D Thesis: “*Quantum Shape Effects*”, [arXiv:2102.04332], *Advisor*: Altug Sisman
- 09/2012 – 07/2014 : **MSc** in *Energy Science & Technology*, Energy Institute, Istanbul Technical University  
MSc. Thesis: “*On The Discrete Nature of Thermodynamics*”, *Advisor*: Altug Sisman
- 09/2006 – 06/2011 : **BSc** in *Physics*, Department of Physics, Koç University  
BSc. Thesis II: “*Bell's Theorem & Hidden Variable Theories*”, 01/2011, *Advisor*: Tekin Dereli  
BSc. Thesis I: “*Quantum Teleportation*”, 05/2010, *Advisor*: Tekin Dereli

### AWARDS & HONORS

- Best PhD Thesis Award, Istanbul Technical University, 2020
- Dean's Honor Roll, Koç University, (Spring 2010 & Fall 2011 Terms)
- Ranked in 3<sup>rd</sup> Place with Honors (Focus: Natural Sciences), Tan College, Bursa, 2006

### FELLOWSHIPS, GRANTS & SCHOLARSHIPS

- Dean's Fund, Faculty of Arts and Sciences, Harvard University (1 year, 2021-2022)
- Postdoctoral Research Fellowship 2219, Scientific and Technological Research Council of Turkey, (1 year, 2021-2022)
- Israel Ministry of Foreign Affairs Scholarship, (1 year, 2018-2019)
- TUBITAK Conference Travel Grant, 2018
- 5x ITU Conference Travel Grants (2013, 2014, 2015, 2016, 2017)
- Full Merit Scholarship, Koç University, (5 years, 2006-2011)

### PROJECTS (2)

- Project Title : Blockchain-integrated tethering app  
Type : Industrial

- Field : Blockchain Utility  
 Funder : Scientific and Technological Research Council of Turkey  
 Budget : 150.000 ₺ (~\$30.000 at the time)  
 Duration : 09/2018 – 09/2019 (1 year)  
 Role : Researcher
2. Project Title : Modernization of ITU Triga Mark-II Nuclear Research Reactor  
 Type : Academic  
 Field : Nuclear Electronics  
 Funder : Ministry of Development, Republic of Turkey  
 Budget : 6.000.000 ₺ (~\$3.000.000 at the time)  
 Duration : 07/2014 – 08/2016 (2 years)  
 Role : Researcher

## PUBLICATIONS (18)

[arXiv author link](#)

1. **A. Aydin**, J. Keski-Rahkonen and E. J. Heller, “Quantum acoustics unravels Planckian resistivity”, *PNAS*, Under review, (2024). [arXiv:2303.06077]
2. J. Keski-Rahkonen, X.-Y. Ouyang, S. Yuan, A. M. Graf, **A. Aydin** and E. J. Heller, “Quantum-acoustical Drude peak shift”, *Phys. Rev. Lett.* Accepted (2024). [arXiv: 2310.19143]
3. **A. Aydin** and A. Sisman, “Origin of the quantum shape effect”, *Phys. Rev. E*, 108, 024105, (2023). [arXiv:2301.12551]
4. **A. Aydin**, “Spectral properties of size-invariant shape transformation”, *Phys. Rev. E*, 107, 054108, (2023). [arXiv:2302.09663]
5. D. Kim, **A. Aydin**, A. Daza, K. N. Avanaki, J. Keski-Rahkonen and E. J. Heller, “Coherent charge carrier dynamics in the presence of thermal lattice vibrations”, *Phys. Rev. B*, 106, 054311, (2022). [arXiv:2005.14239v4]
6. **A. Aydin**, A. Sisman, J. Fransson, A. M. Black-Schaffer and P. Dutta, “Thermodeflect voltage in graphene nanoribbon junctions”, *J. Phys.: Condens. Matter*, 34, 195304, (2022) [OA]. [arXiv:2104.12628]
7. **A. Aydin**, J. Fransson and A. Sisman, “Quantum shape oscillations in the thermodynamic properties of confined electrons in core-shell nanostructures”, *J. Phys.: Condens. Matter*, 34, 025301, (2021). [arXiv:2211.02862]
8. A. Sisman, **A. Aydin** and J. Fransson, “Thermoshape effect for energy harvesting with nanostructures”, *J. Phys. D: Appl. Phys.*, 53, 375501, (2020) [OA]. [arXiv:1907.02819]
9. **A. Aydin**, A. Sisman and R. Kosloff, “Landauer's principle in a quantum Szilard engine without Maxwell's demon”, *Entropy*, 22, 294, (2020) [OA], [Feature Paper]. [arXiv:1908.04400]
10. **A. Aydin**, J. Fransson and A. Sisman, “Thermosize voltage induced in a ballistic graphene nanoribbon junction”, *J. Appl. Phys.*, 126, 104302, (2019) [OA], [Editor's Pick]. [arXiv:1905.12441]
11. **A. Aydin**, T. Oikonomou, G. B. Bagci and A. Sisman, “Discrete and Weyl density of states for photonic dispersion relation”, *Phys. Scr*, 94, 105001, (2019). [arXiv:1809.03495]
12. **A. Aydin** and A. Sisman, “Quantum shape effects and novel thermodynamic behaviors at nanoscale”, *Phys. Lett. A*, 383, 655-665 (2019). [arXiv:1807.02415]
13. C. Firat, A. Sisman and **A. Aydin**, “Characterization of density oscillations in confined and degenerate Fermi gases”, *Mod. Phys. Lett. B*, 32, 1850393, (2018). [arXiv:1911.04258]
14. **A. Aydin** and A. Sisman, “Quantum oscillations in confined and degenerate Fermi gases. II. The phase diagram and applications of half-vicinity model”, *Phys. Lett. A*, 382, 1813-1817, (2018).
15. **A. Aydin** and A. Sisman, “Quantum oscillations in confined and degenerate Fermi gases. I. Half-vicinity model”, *Phys. Lett. A*, 382, 1807-1812, (2018). The version before split: “Half-vicinity model and a phase diagram for quantum oscillations in confined and degenerate Fermi gases”, (2017). [arXiv:1709.01816]
16. **A. Aydin** and A. Sisman, “Discrete density of states”, *Phys. Lett. A*, 380, 1236-1240, (2016). [arXiv:1602.05219]
17. **A. Aydin** and A. Sisman, “Dimensional transitions in thermodynamic properties of ideal Maxwell-Boltzmann gases”, *Phys. Scr.*, 90, 045208, (2015). [arXiv:1502.07309]
18. **A. Aydin** and A. Sisman, “Discrete nature of thermodynamics in confined ideal Fermi gases”, *Phys. Lett. A*, 378, 2001-2007, (2014). [arXiv:1408.1086]

## INVITED TALKS (16)

1. “Implications of Nonuniform Level Scaling for Quantum Energy Devices”, [YouTube link: [https://youtu.be/53\\_aLQ29t0M](https://youtu.be/53_aLQ29t0M)], *Quantum Energy Initiative YouTube Seminar Series*, 13 Dec 2023, Online
2. “Quantum Confinement Effect: From discrete spectrum to Nobel”, (In Turkish) [YouTube link: <https://youtu.be/AIn1QURHTIM>], Quantum Technologies Academy, *QTurkey*, 3 Nov 2023, Online

3. "Heat Engines Driven by Quantum Shape Effect", *Mini-Workshop on Quantum Thermodynamics by QuEST @ Koç University*, 25 Oct 2023, Istanbul, Turkey
4. "Academic Career and Challenges in the Field of Quantum Technologies", Invited Panelist at the Quantum Days '23, *QTurkey*, 7 Oct 2023, Online
5. "Advancing Quantum Materials and Devices: Fundamental Physics to Energy Applications", *Sabancı University, FENS Seminar*, 17 May 2023, Istanbul, Turkey
6. "Quantum Revolutions", Invited Panelist at the 14 April World Quantum Day, *QTurkey*, 14 Apr 2023, Istanbul, Turkey
7. "Universal Planckian resistivity from coherent charge carrier-lattice vibration dynamics", *Sabancı University, Physics Seminar*, 12 Apr 2023, Istanbul, Turkey
8. "Coherent state picture of charge carrier-lattice vibration dynamics", *Kobit |7> Quantum Optics and Information Meeting*, 2 Feb 2023, Eskişehir, Turkey
9. "Hearing the shapes of size-invariant quantum wells", [YouTube link: <https://youtu.be/XYx0f-BWT7o>], *Istanbul Mathematical Physics Days 2022*, 18 Dec 2022, Online
10. "Coherent state representation of lattice vibrations and coherent electron dynamics", *Bilkent University, Department of Physics, Physics Seminar*, 2 Nov 2022, Ankara, Turkey
11. "Coherent Charge Carrier Dynamics under Thermal Lattice Vibrations (A new perspective for strange metals)", *Istanbul YMF (Condensed Matter Physics) Meeting, Istanbul University*, 27 Sep 2022, Istanbul, Turkey
12. "Coherent Electron Dynamics in Thermal Lattice Vibrations (A new perspective for strange metals)", *Harvard-Smithsonian Center for Astrophysics, Institute for Theoretical Atomic, Molecular and Optical Physics (ITAMP) Luncheon*, 7 Apr 2022, Cambridge, MA, USA
13. "Quantum shape effects", [YouTube link: <https://youtu.be/hK5qtsibA2E>], *QWorld – QTalks*, 23 Nov 2021, Online
14. "Landauer's principle in a quantum Szilard engine in the absence of an explicit Maxwell's Demon", *QuEST Journal Club Meeting, Koç University*, 17 Jan 2020, Istanbul, Turkey
15. "Quantum shape effects and novel thermodynamic behaviors at nanoscale", *QuEST Journal Club Meeting, Koç University*, 5 Jul 2019, Istanbul, Turkey
16. "The Intrinsic Discrete Nature of Thermodynamic Quantities in Fermi Gases", *Koç University, Graduate School of Sciences and Engineering, Physics Seminar*, 17 Oct 2014, Sarıyer, Istanbul, Turkey

## CONFERENCES (28)

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1. **A Aydin**, "Nanoscale carbon-based unipolar thermoelectric junctions", [Talk], *4th National Carbon Conference*, 28-29 March 2024, Istanbul, Turkey
2. E. J. Heller, **A Aydin**, J. Keski-Rahkonen, S. Yuan, X. Ouyang and A. Graf, "The (very late) advent of quantum acoustics with application to strange metals", [Non-presenting author], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
3. J. Keski-Rahkonen, **A Aydin**, and E. J. Heller, "Twin peaks and boomerang in quantum-chaotic systems", [Non-presenting author], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
4. X. Ouyang, J. Keski-Rahkonen, E. J. Heller, A. Graf, **A Aydin**, and S. Yuan, "Drude peak displacement by quantum acoustics", [Non-presenting author], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
5. S. Yuan, X. Ouyang, J. Keski-Rahkonen, **A Aydin**, A. Graf and E. J. Heller, "Quantum acoustics: the coherent state formalism for electron-lattice interaction", [Non-presenting author], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
6. A. Graf, J. Keski-Rahkonen, **A Aydin**, and E. J. Heller, "Genesis of pseudogaps from electron-lattice resonances", [Non-presenting author], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
7. **A Aydin**, "Quantum thermal avalanche: Spectral characteristics of size-invariant variations of energy landscapes", [Talk], *APS March Meeting*, 4-8 March 2024, Minneapolis, Minnesota, USA
8. **A. Aydin**, "Implications of nonuniform level scaling for quantum energy devices", [Poster], *Quantum Energy Initiative (QEI) Workshop*, 20-24 Nov 2023, Singapore
9. **A. Aydin** and E. J. Heller, "Planckian scattering rate from coherent charge carrier-lattice vibration dynamics", [Talk], *APS March Meeting*, 5-10 March 2023, Las Vegas, Nevada, USA
10. E. J. Heller, **A Aydin**, D. Kim, J. Keski-Rahkonen, Z. Li, H. Chen and A. Graf, "Understanding pseudogaps in high T<sub>c</sub> materials", [Non-presenting author], *APS March Meeting*, 5-10 March 2023, Las Vegas, Nevada, USA
11. **A. Aydin**, A. Daza, D. Kim, K. N. Avnani and E. J. Heller, "Coherent state description of lattice vibrations and high-temperature coherence effects", [Poster], *APS March Meeting*, 14-18 March 2022, Chicago, Illinois, USA
12. **A. Aydin**, A. Daza, D. Kim, K. N. Avnani and E. J. Heller, "Electron coherence effects in the coherent state picture for electron-phonon interactions", [Online, Talk], *21th International Conference in Strongly Correlated Electron Systems (SCES2020/21)*, 27 September-2 October 2021, Brazil

13. **A. Aydin**, A. Sisman and J. Fransson, “Single-material unipolar thermoelectrics at nanoscale”, [[Online](#), [Poster](#)], [[YouTube link: https://youtu.be/1BdO3zSHlfo](#)] *28th Joint Conference of the Condensed Matter Divisions of the Spanish Royal Physics Society and European Physical Society (CMD2020GEFES)*, 31 August-4 September 2020, Madrid, Spain
14. A. Sisman, **A. Aydin** and J. Fransson, “The thermoshape voltage induced by quantum shape effects”, [[Online](#), [Talk](#)], *APS March Meeting*, 2-6 March 2020, Denver, Colorado, USA
15. **A. Aydin**, A. Sisman and R. Kosloff, “Landauer's principle in a quantum Szilard engine in the absence of an explicit Maxwell's Demon” [[Poster](#)], “Workshop on Quantum Thermodynamics for Young Scientists”, 713. WE-Heraeus-Seminar, *Wilhelm und Else Heraeus-Stiftung*, 2-6 February 2020, Physikzentrum Bad Honnef, Germany
16. **A. Aydin**, J. Fransson and A. Sisman, “Quantum shape effects on thermodynamics of electrons”, [[Talk](#)], *15th Joint European Thermodynamics Conference (JETC19)*, 20-24 May 2019, Barcelona, Spain
17. A. Sisman, **A. Aydin** and J. Fransson, “Thermoshape potential”, [[Poster](#)], *15th Joint European Thermodynamics Conference (JETC19)*, 20-24 May 2019, Barcelona, Spain
18. **A. Aydin**, A. Sisman and Z. F. Ozturk, “Confinement effects on micro/nanoscale radiative heat transfer”, [[Talk](#)], *29th International Symposium on Transport Phenomena (ISTP29)*, 30 October-2 November 2018, Honolulu, Hawaii, USA
19. **A. Aydin** and A. Sisman, “Quantum shape effects on thermodynamic quantities” [[Talk](#)], “Quantum Science and Quantum Technologies Workshop”, *International Centre for Theoretical Physics (ICTP)*, 11-15 September 2017, Trieste, Italy
20. “Recent Progress in the Physics of Thermal Transport”, [[Attendee](#)], *International Centre for Theoretical Physics (ICTP) – Eurasian Centre for Advanced Research (ECAR)*, 17-21 July 2017, Izmir Institute of Technology, Izmir, Turkey
21. **A. Aydin** and A. Sisman, “Macroscopic quantum shape effects on thermodynamic potentials”, [[Talk](#)], *14th Joint European Thermodynamics Conference (JETC17)*, 21-25 May 2017, Budapest, Hungary
22. **A. Aydin** and A. Sisman, “A torque induced by matter waves as a new macroscopic quantum phenomenon”, [[Talk](#)], *5th Quantum Thermodynamics Conference (QTD5)*, pp: 30-31, 13-17 March 2017, Oxford, UK
23. **A. Aydin** and A. Sisman, “Phase transition of quantum oscillations in 1D Fermi gas”, [[Poster](#)], *25th Sitges Conference on Statistical Mechanics: Non-equilibrium Phenomena in Confined Systems*, p: 56, 6-10 June 2016, Barcelona, Spain
24. “Nanodevice Physics”, [[Attendee](#)], *Feza Gürsey Summer and Winter Science Schools, Feza Gürsey Institute, Boğaziçi University*, 27-28 July 2015, Kandilli, Istanbul, Turkey
25. **A. Aydin**, A. Sisman and Z. F. Ozturk, “Thermal conductivity oscillations in 2DEG”, [[Talk](#)], *13th Joint European Thermodynamics Conference (JETC15)*, 20-22 May 2015, Nancy, France
26. **A. Aydin** and A. Sisman, “Dimensional transition point in thermodynamic properties of Maxwell-Boltzmann gases”, [[Talk](#)], *4th International Conference on Statistical Physics (SigmaPhi14)*, pp: 7-8, 7-11 July 2014, Rhodes, Greece
27. “Exact and Numerical Models of Low-Dimensional Quantum Structures”, [[Attendee](#)], *International Advanced Research Schools in Physics (IARS), Institute of Theoretical and Applied Physics (ITAP)*, 4-12 August 2013, Turunç, Marmaris, Turkey
28. **A. Aydin** and A. Sisman, “Discrete nature of thermodynamic properties”, [[Talk](#)], *12th Joint European Thermodynamics Conference (JETC13)*, pp: 425-429, 1-5 July 2013, Brescia, Italy

## ORGANIZED CONFERENCES (2)

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1. “2<sup>nd</sup> Workshop on Quantum and Nano Thermodynamics”, [[Co-organizer](#)], “*Quantum shape effects and novel thermodynamic behaviors at nanoscale*” [[Talk](#)], *Nano Energy Research Group (NERG)*, 27-29 September 2018, Älvkarleby, Sweden
2. “Workshop on Quantum and Nano Thermodynamics”, [[Co-organizer](#)], “*Nanoscale Thermodynamics-II: Quantum Shape Effects*” [[Talk](#)], *Nano Energy Research Group (NERG)*, 6-8 September 2017, Energy Technopark, Energy Institute, ITU, Istanbul, Turkey

## SEMINARS (10)

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1. “Quantum Materials and Devices”, *Fundamental and Contemporary Topics in Physics*, Sabancı University, 12 Dec 2023, Istanbul, Turkey
2. “Real-space dynamics of a coupled electron-phonon system”, *QuEST Journal Club Meeting*, Koç University, 11 Aug 2023, Istanbul, Turkey
3. “Spectral properties of size-invariant shape transformation”, *QuEST Journal Club Meeting*, Koç University, 7 Apr 2023, Istanbul, Turkey
4. “Landauer's principle in a quantum Szilard engine without Maxwell's demon”, *QuEST Journal Club Meeting*, Koç University, 24 Feb 2023, Istanbul, Turkey
5. “Coherent state representation of lattice vibrations and coherent charge carrier dynamics”, *Koç University, Department of Physics Seminar*, 6 Dec 2022, Istanbul, Turkey
6. “From nanoscale thermodynamics to strange metals”, *QuEST Journal Club Meeting*, Koç University, 16 Sep 2022, Istanbul, Turkey

7. “Quantum shape effects: The quantum-mechanical influence of geometry in the thermodynamics of confined systems”, *ITU Energy Institute, PhD Thesis Workshop*, 12-13 Sep 2019, Istanbul, Turkey
8. “Quantum shape effects and novel thermodynamic behaviors at nanoscale”, *Hebrew University of Jerusalem, Fritz Haber Seminar*, 20 Mar 2019, Jerusalem, Israel
9. “Quantum shape effects and novel thermodynamic behaviors at nanoscale”, *Uppsala University, Department of Physics, Materials Theory Division Seminar*, 24 Oct 2018, Uppsala, Sweden
10. “Quantum shape effects on thermodynamic quantities”, *ITU Energy Institute, PhD Thesis Workshop*, 28-29 Sep 2017, Istanbul, Turkey

## TEACHING

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### ▪ Sabancı University

Spring 2024 : **NS 101**: Science of Nature - Universe Module: Are we alone in the Universe?  
Undergraduate course

: **PROJ 201**: Undergraduate Project - Hearing the shape of a drum

Fall 2023 : **PHYS 411/511**: Electromagnetic Theory

Undergraduate/Graduate course

### ▪ Koç University

Spring 2023 : **PHYS 550**: Nanoscale Thermodynamics & Transport

Graduate course: (I designed fully from scratch and taught this course)

9 students (6 undergraduates, 2 graduates, 1 teaching assistant)

### ▪ Training

13/09/23 – 15/09/23 : *Attendee*, Workshop on Learner-Centered Approaches in College STEM Education, Sabancı University  
An intensive 3-day workshop focused on active teaching/learning methods

Spring 2022 : *Guest Lecturer and Student Mentor*, PHYS 218: Quantum Chaos & Localization, Harvard University

Gave a guest lecture, prepared homeworks and mentored students

09/2013 – 09/2020 : *Teaching Assistant* – Energy Institute, Istanbul Technical University

Graduate courses: Engineering Mathematics, Physics of Solar Cells, Neutron Transport Theory

Gave problem sections, review lectures and held office hours

02/2012 – 06/2012 : *Physics Tutor* – Fen Bilimleri Dershanesi, Etiler, Istanbul

Teaching high school physics subjects

## ACADEMIC SERVICE

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### ▪ Peer Reviewerships

Annals of Physics, Journal of Applied Physics, Physica E: Low-dimensional Systems and Nanostructures, Physical Review E, SciPost Physics

### ▪ Sabancı University Committee Memberships

Graduation Ceremony Committee (2023-Present), Outreach Committee (2024-Present), Discipline Court (2024-Present).

### ▪ Ph.D. Dissertation Committee Memberships

(In Process) Student: Hamideh Masouleh, Advisor: Ozgur E. Mustecaplioglu, Koç University

## OUTREACH AND SCIENCE COMMUNICATION

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▪ Writing popular science articles in sarkac.org (a popular science magazine of Bilim Akademisi – Science Academy of Turkey)

▪ **Blochbusters** ([www.blochbusters.com](http://www.blochbusters.com)), 09/2020 – Present

Co-founded an online platform to bring science & art together and to inspire students from all backgrounds to join science

▪ Organizing seminars and social tours for visiting researchers, Nano Energy Research Group, 2013-2020

## SOCIETIES

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09/2022 – Present : *Member*, Quantum Energy Initiative (QEI)

08/2018 – Present : *Member*, Quantum Transport & Thermodynamics Society (QTTS)

07/2018 – Present : *Member*, American Physical Society (APS)

07/2011 – Present : *Member*, Koç University Alumni Association (KÜME)

## SKILLS

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- Computer : Mathematica, MATLAB, COMSOL Multiphysics, LaTeX, Linux, Python, Kwant, QuTiP
- Languages : English (Fluent, PTE Academic: Received perfect score in all parts), German (Novice), Turkish (Native)

## HOBBIES

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- Music : Released a professional rock music album called “Zamandaki Yabancı” (Stranger in Time) in 2013  
Composing, Song-writing, Performing (Singing, playing guitars and keyboards), working on the 2<sup>nd</sup> music album  
Critical listening (Creator of the program called MusicCritic, where I rate songs that I listen systematically)
- Basketball : Amateur playing, Founder & Captain of San Andreas Chapullers in Ekşi Sözlük Basketball League (Seasons 3&4)
- Writing : Avant-garde humor (Writing regularly in my blog at [www.serbestcigrisim.com](http://www.serbestcigrisim.com), since 1/1/2020)  
A non-fiction book project about the philosophy of the life from the perspective of science
- Reading : Mostly non-fiction, related to math, physics, philosophy, history, education, sociology
- Other : Travelling, Swimming, Hiking, Chess

## REFERENCES

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- **Eric J. Heller**  
Department of Physics and Department of Chemistry & Chemical Biology, Harvard University, USA  
Relation: Postdoc PI  
Email: [eheller@fas.harvard.edu](mailto:eheller@fas.harvard.edu)
  - **Altug Sisman**  
Department of Physics & Astronomy, Uppsala University, Sweden  
Relation: MSc and PhD Advisor  
Email: [altug.sisman@physics.uu.se](mailto:altug.sisman@physics.uu.se)
  - **Ozgur E. Mustecaplioglu**  
Department of Physics, Koç University, Turkey  
Relation: PhD Defense Jury Member, Undergraduate Instructor, Postdoc PI  
Email: [omustecap@ku.edu.tr](mailto:omustecap@ku.edu.tr)
  - **Ronnie Kosloff**  
Institute of Chemistry, Hebrew University of Jerusalem, Israel  
Relation: Host Supervisor, Collaborator  
Email: [ronnie@fh.huji.ac.il](mailto:ronnie@fh.huji.ac.il)
  - **Jonas Fransson**  
Department of Physics & Astronomy, Uppsala University, Sweden  
Relation: Host Supervisor, Collaborator  
Email: [jonas.fransson@physics.uu.se](mailto:jonas.fransson@physics.uu.se)
  - **Tekin Dereli**  
Department of Physics, Koç University, Turkey  
Relation: MSc Defense Jury Member, Undergraduate Advisor  
Email: [tdereli@ku.edu.tr](mailto:tdereli@ku.edu.tr)
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