

# Sinem Arslan Ölçer

# Curriculum Vitae

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PERSONAL INFORMATION	Research Assistant Department of Mathematics, Middle East Technical University, Ankara, Turkey	Phone: +90 (312) 210-5366 E-mail: arsinem@metu.edu.tr Date of Birth: August 7, 1993 Place of Birth: İzmir, Turkey
RESEARCH INTERESTS	Numerical Analysis, Numerical Solutions of Partial Differential Equations, Magnetohydrodynamic flow	
EDUCATION	<b>Middle East Technical University</b> , Ankara, Turkey Ph.D., Department of Mathematics	September 2018 – present (GPA 4.0/4.0)
	<b>Middle East Technical University</b> , Ankara, Turkey M.S., Department of Mathematics	September 2016 – June 2018 (GPA 3.93/4.0)
	<b>Dokuz Eylül University</b> , İzmir, Turkey B.S., Department of Mathematics	September 2011 – June 2016 (GPA 3.97/4.0)
EMPLOYMENT	Research Assistant at Department of Mathematics, Middle East Technical University, Ankara, Turkey	October 2017-present
AWARDS AND SCHOLARSHIPS	<b>Turkish Scientific and Technical Research Council (TÜBİTAK)</b> , Ankara, Turkey	
	<ul style="list-style-type: none"><li>2211-A Doctorate Scholarship Program</li><li>2224-A Travel Scholarship for Scientific Meetings</li></ul>	September 2018-present August 2019
	<b>Graduation Awards from Dokuz Eylül University</b>	
	<ul style="list-style-type: none"><li>Ranked first among Faculty of Arts and Sciences and Department of Mathematics graduates of the bachelors degree programs in the 2015-2016 academic year</li></ul>	
	<b>Credit and Dormitories Institution (KYK)</b> , Ankara, Turkey	
	<ul style="list-style-type: none"><li>Undergraduate Scholarship</li></ul>	December 2011-June 2016
	<b>Scuola Matematica Interuniversitaria (SMI)</b> , Perugia, Italy	
	<ul style="list-style-type: none"><li>Summer School Scholarship</li></ul>	July 2015-August 2015
LANGUAGE SKILLS	Turkish (native), English(fluent)	
COMPUTER SKILLS	Matlab, L <sup>A</sup> T <sub>E</sub> X, Wolfram Mathematica, MS Office (Excel, Word)	
PUBLICATIONS	<b>Journal Articles Published</b>	
	<ul style="list-style-type: none"><li>Arslan S., Tezer-Sezgin M., "Exact and FDM solutions of 1D MHD flow between parallel electrically conducting and slipping plates", <i>Advances in Computational Mathematics</i>, 2019, <a href="https://doi.org/10.1007/s10444-019-09669-x">https://doi.org/10.1007/s10444-019-09669-x</a>.</li><li>Arslan S., Tezer-Sezgin M., "Convergence, stability and numerical solution of unsteady free convection MHD flow between two slipping plates", <i>Mathematical Methods in the Applied Sciences</i>, 2021, <a href="https://doi.org/10.1002/ma.7755">https://doi.org/10.1002/ma.7755</a></li></ul>	

### Conference Proceedings (Refereed) Published

- Arslan S., Tezer-Sezgin M., "Fdm solution of mhd flow in a rectangular duct with slipping and partly insulated partly conducting side walls", *Journal of Physics: Conference Series*, 8th International Conference on Mathematical Modeling in Physical Science (IC-MSQUARE) 2019, <https://doi.org/10.1088/1742-6596/1391/1/012081>.

### Chapter in a Book

- Arslan S., Tezer-Sezgin M., *Finite Difference Solutions of 2D Magnetohydrodynamic Channel Flow in a Rectangular Duct*, Numerical Mathematics and Advanced Applications ENUMATH 2019, European Conference, Egmond aan Zee, The Netherlands, September 30 - October 4, Springer International Publishing, Series volume 139, pp. 63-71, DOI:10.1007/978-3-030-55874-1, ISSN: 1439-7358, <https://www.springer.com/gp/book/9783030558734>.

### SCIENTIFIC MEETINGS

- *Finite Difference Solutions of 2D Magnetohydrodynamic Channel Flow in a Rectangular Duct*, European Numerical Mathematics and Advanced Applications Conference (ENUMATH), Egmond aan Zee, The Netherlands, 30<sup>th</sup> September-4<sup>th</sup> October, 2019.
- *Fdm solution of mhd flow in a rectangular duct with slipping and partly insulated partly conducting side walls*, 8th International Conference on Mathematical Modeling in Physical Science (IC-MSQUARE), Bratislava, Slovakia, 26-29 August, 2019.
- *Finite Difference Solutions of 1D Magnetohydrodynamics (MHD) Channel Flow with Slipping and Electrically Conducting Walls*, European Seminar on Computing (ESCO), Pilsen, Czech Republic, June 3-8, 2018.

### TEACHING EXPERIENCE

#### Middle East Technical University, Ankara, Turkey

##### Teaching Assistant

- MATH 120 Calculus of Functions of Several Variables  
Spring 2021, Spring 2019, Spring 2018
- MATH 119 Calculus with Analytic Geometry  
Fall 2021, Fall 2020, Fall 2019, Fall 2018, Spring 2017
- MATH 126 Basic Mathematics II  
Spring 2017
- MATH 125 Basic Mathematics I  
Fall 2017

### REFERENCES

Available upon request.