

Asst. Prof. MUSTAFA AĞGÜL

Personal Information

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Address: Hacettepe Üniversitesi Matematik Bölümü

Education Information

Doctorate, Michigan Technological University, College Of Sciences And Arts, Computational And Applied Mathematics, United States Of America 2016 - 2018

Post Graduate, Michigan Technological University, College Of Sciences And Arts, Computational And Applied Mathematics, United States Of America 2014 - 2016

Under Graduate, Hacettepe Üniversitesi, Fen Fakültesi, Matematik, Turkey 2006 - 2012

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, HIGH ACCURACY METHODS AND REGULARIZATION TECHNIQUES FOR FLUID FLOWS AND FLUID-FLUID INTERACTION, Michigan Technological University, Computational And Applied Mathematics, 2018

Post Graduate, A HIGH ACCURACY MINIMALLY INVASIVE REGULARIZATION TECHNIQUE FOR NAVIER-STOKES EQUATIONS AT HIGH REYNOLDS NUMBER, Michigan Technological University, Computational And Applied Mathematics, 2016

Research Areas

Mathematics, Differential Equations, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Lecturer PhD, Hacettepe Üniversitesi, Fen Fakültesi, Matematik, 2019 - Continues

Lecturer, Michigan Technological University, College of Sciences and Arts, Mathematical Sciences, 2015 - 2018

Professional Experience

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. Defect-deferred correction method based on a subgrid artificial viscosity modeling

AĞGÜL M.

JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.497, no.2, 2021 (Journal Indexed in SCI)

II. **Defect-deferred correction method based on a subgrid artificial viscosity model for fluid-fluid interaction**

AĞGÜL M., Kaya S.

APPLIED NUMERICAL MATHEMATICS, vol.160, pp.178-191, 2021 (Journal Indexed in SCI)

III. **Defect correcting extrapolation technique for Oseen and Navier–Stokes Flows**

AĞGÜL M.

Computers and Mathematics with Applications, vol.80, no.5, pp.1029-1049, 2020 (Journal Indexed in SCI Expanded)

IV. **A projection based variational multiscale method for a fluid–fluid interaction problem**

Ağgül M., Eroglu F. G. , Kaya S., Labovsky A. E.

Computer Methods in Applied Mechanics and Engineering, vol.365, 2020 (Journal Indexed in SCI)

V. **Two approaches to creating a turbulence model with increased temporal accuracy**

Aggul M., Kaya S., Labovsky A. E.

APPLIED MATHEMATICS AND COMPUTATION, vol.358, pp.25-36, 2019 (Journal Indexed in SCI)

VI. **A DEFECT-DEFERRED CORRECTION METHOD FOR FLUID-FLUID INTERACTION**

Aggul M., Connors J. M. , Erkmen D., Labovsky A. E.

SIAM JOURNAL ON NUMERICAL ANALYSIS, vol.56, no.4, pp.2484-2512, 2018 (Journal Indexed in SCI)

VII. **A high accuracy minimally invasive regularization technique for navier-stokes equations at high reynolds number**

Aggul M., Labovsky A.

NUMERICAL METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS, vol.33, no.3, pp.814-839, 2017 (Journal Indexed in SCI)

Scientific Refereeing

INTERNATIONAL JOURNAL OF AUTOMOTIVE ENGINEERING AND TECHNOLOGİES, National Scientific Refreed Journal, June 2020

COMMUNICATIONS IN COMPUTATIONAL PHYSICS, SCI Journal, June 2020

BOUNDARY VALUE PROBLEMS, SCI Journal, March 2020

Edit Congress and Symposium Activities

WOPAM 2019: Workshop on Pure and Applied Mathematics, Invited Speaker, Erzurum, Turkey, 2019

BEYOND 2019: Computational Science and Engineering Conference, Attendee, Ankara, Turkey, 2019

3rd National Polar Sciences Workshop, Attendee, Ankara, Turkey, 2019

Palandöken Uygulamalı Matematik ve Mühendislik Günleri, Invited Speaker, Erzurum, Turkey, 2019

International Conference on Applied Analysis and Mathematical Modeling, Attendee, İstanbul, Turkey, 2018

SIAM Great Lake Section Annual Meeting, Attendee, Michigan, United States Of America, 2018

MAA UP Regional Meeting at NMU, Attendee, Michigan, United States Of America, 2017

12. ANKARA MATEMATİK GÜNLERİ, Attendee, Ankara, Turkey, 2017

SIAM Great Lake Section Spring Meeting, Attendee, Michigan, United States Of America, 2017

The 2nd Annual Meeting of SIAM Central States Section, Attendee, Arkansas, United States Of America, 2016

ICAA-2016, Attendee, Kırşehir, Turkey, 2016

Numerical Analysis and Predictability of Fluid Motion, Attendee, Pennsylvania, United States Of America, 2016

CITATIONS

Total Citations (WOS):11

h-index (WOS):2

Invited Talks

WOPAM 2019: Workshop on Pure and Applied Mathematics , Workshop, Atatürk Üniversitesi, Turkey, November 2019

Palandöken Uygulamalı Matematik ve Mühendislik Günleri , Conference, Atatürk Üniversitesi, Turkey, January 2019

Scholarships

Graduate Fellowship, University, 2015 - 2019

1416 Sayılı Kanun, Ministry of Education, 2013 - 2018

Awards

AĞGÜL M., Outstanding Research Award, Michigan Technological University, April 2018