

## Assoc. Prof. AYTEKİN BAYRAM ÇIBİK

### Personal Information

Office Phone: [+90 0312 202 1088](tel:+9003122021088)

Email: [abayram@gazi.edu.tr](mailto:abayram@gazi.edu.tr)

Other Email: [aytechin@gmail.com](mailto:aytechin@gmail.com)

Web: <https://avesis.gazi.edu.tr/abayram>

Address: [abayram@gazi.edu.tr](mailto:abayram@gazi.edu.tr)

### Education Information

Doctorate, Middle East Technical University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 2004 - 2011

Undergraduate, Cukurova University, Fen-Edebiyat Fakültesi, Matematik Bölümü, Turkey 2000 - 2004

### Foreign Languages

English, C1 Advanced

### Research Areas

Mathematics, Differential Equations, Partial Differential Equations, Numerical Analysis, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Gazi University, Fen Fakültesi, Matematik Bölümü, 2017 - Continues

Assistant Professor, Gazi University, Fen Fakültesi, Matematik, 2012 - 2017

Research Assistant, Gazi University, Fen Fakültesi, Matematik Bölümü, 2005 - 2012

### Academic and Administrative Experience

Gazi University, Fen Fakültesi, Matematik Bölümü, 2017 - Continues

### Courses

Differential Equations , Undergraduate, 2016 - 2017

Mathematics I, Undergraduate, 2016 - 2017

Diferensiyel Denklemler, Undergraduate, 2016 - 2017

Araştırma Projesi, Undergraduate, 2016 - 2017

### Advising Theses

ÇIBİK A. B. , Black Scholes denkleminin sonlu eleman çözümleri, Postgraduate, C.ASAR(Student), 2019

ÇIBIK A. B. , The Finite Element Solution Of Convection-Diffusion-Reaction Type Equations, Postgraduate, M.YILDIRIM(Student), 2016

ÇIBIK A. B. , Solution Of Some Partial Differential Equations By Finite Difference Method., Postgraduate, T.FIRAT(Student), 2015

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

- I. **A second order decoupled penalty projection method based on deferred correction for MHD in Elsasser variable**  
Erkmen D., Kaya S., Cibik A. B.  
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, vol.371, 2020 (Journal Indexed in SCI)
- II. **Analysis of Second Order Time Filtered Backward Euler Method for MHD Equations**  
Cibik A. B. , Eroğlu F. G. , Kaya S.  
JOURNAL OF SCIENTIFIC COMPUTING, vol.82, no.2, 2020 (Journal Indexed in SCI)
- III. **LONG TIME STABILITY OF A LINEARLY EXTRAPOLATED BLENDED BDF SCHEME FOR MULTIPHYSICS FLOWS**  
Cibik A. B. , Eroğlu F. G. , Kaya S.  
INTERNATIONAL JOURNAL OF NUMERICAL ANALYSIS AND MODELING, vol.17, pp.24-41, 2020 (Journal Indexed in SCI)
- IV. **A family of second order time stepping methods for the Darcy-Brinkman equations**  
Cibik A. B. , DEMİR M., Kaya S.  
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.472, no.1, pp.148-175, 2019 (Journal Indexed in SCI)
- V. **Variational multiscale method for the optimal control problems of convection-diffusion-reaction equations**  
ÇIBIK A. B. , YILMAZ F. N.  
TURKISH JOURNAL OF MATHEMATICS, vol.42, no.1, pp.164-180, 2018 (Journal Indexed in SCI)
- VI. **A projection-based variational multiscale method for the optimal control problems governed by the stationary Navier-Stokes equations**  
YILMAZ F. N. , Cibik A. B.  
APPLIED NUMERICAL MATHEMATICS, vol.106, pp.116-128, 2016 (Journal Indexed in SCI)
- VII. **The effect of a sparse grad-div stabilization on control of stationary Navier-Stokes equations**  
Cibik A. B.  
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.437, no.1, pp.613-628, 2016 (Journal Indexed in SCI)
- VIII. **Finite element analysis of a projection-based stabilization method for the Darcy-Brinkman equations in double-diffusive convection**  
Cibik A. B. , Kaya S.  
APPLIED NUMERICAL MATHEMATICS, vol.64, pp.35-49, 2013 (Journal Indexed in SCI)
- IX. **A projection-based stabilized finite element method for steady-state natural convection problem**  
Cibik A. B. , Kaya S.  
JOURNAL OF MATHEMATICAL ANALYSIS AND APPLICATIONS, vol.381, no.2, pp.469-484, 2011 (Journal Indexed in SCI)

### Articles Published in Other Journals

- I. **Brezzi Pitkaranta stabilization and a priori error analysis for the Stokes Control**  
ÇIBIK A. B. , YILMAZ F. N.  
An international journal of optimization and control, vol.7, no.1, pp.75-82, 2017 (Refereed Journals of Other

Institutions)

## Books & Book Chapters

I. **Çözümlü Diferensiyel Denklemler Problemleri**

ÇEKİM B., İÇÖZ G., ÇİBIK A. B.

ders zamanı, Ankara, 2019

## Refereed Congress / Symposium Publications in Proceedings

I. **Curvature Stabilization and Thermally Driven Flows**

ÇİBIK A. B.

8TH INTERNATIONAL EURASIAN CONFERENCE ON MATHEMATICAL SCIENCES AND APPLICATIONS, Baku, Azerbaijan, 27 - 30 August 2019

II. **A Numerical Study of Second Order Time Stepping Methods for the Boussinesq Equations**

DEMİR M., ÇİBIK A. B., KAYA MERDAN S.

BEYOND: Workshop on Computational Science and Engineering, Turkey, 20 - 21 October 2018

III. **Numerical analysis of a Family of Second Order Time Stepping Methods for Boussinesq Equations**

ÇİBIK A. B., DEMİR M., KAYA MERDAN S.

World Congress on Engineering 2018, 4 - 06 July 2018, vol.1, pp.56-59

IV. **Doğal Konveksiyon Problemleri için ikinci Mertebeden Zaman Adımlamas Yöntemleri Ailesinin Sayısal Analizi**

DEMİR M., ÇİBIK A. B., KAYA MERDAN S.

13. Ankara Matematik Günleri, Turkey, 27 - 28 May 2018

V. **Konveksiyon-difüzyon-reaksiyon denkleminin optimal kontrolü için izdüşüm esaslı varyasyonel çoklu ızgarayöntemi**

ÇİBIK A. B.

II. Uluslararası Multidisipliner Çalışmaları Kongresi, 4 - 05 May 2018

VI. **Konveksiyon Difüzyon Reaksiyon Denklemleri için Sonlu Elemanlar Yöntemi**

Yıldırım M., ÇİBIK A. B.

11. Ankara matematik günleri, Ankara, Turkey, 26 - 27 May 2016

VII. **The effect of a sparse grad div stabilization on control of stationary Navier Stokes equations**

ÇİBIK A. B.

International Conference on Scientific Computation and Differential Equations 2015, Potsdam, Germany, 14 - 18 September 2015

VIII. **Finite element analysis of IMEX methods for the incompressible non isothermal flows**

ÇİBIK A. B.

The 3rd international conference on complex dynamical systems, Ankara, Turkey, 24 - 26 November 2014

IX. **A finite element error analysis for the natural convection equations with an infinite Prandtl number**

ÇİBIK A. B., KAYA MERDAN S.

International Conference on Applied Analysis and Algebra 2011, İstanbul, Turkey, 29 June - 02 July 2011

X. **Doğal konveksiyon problemi için iki seviyeli metodun nümerik analizi**

ÇİBIK A. B.

5. Ankara Matematik Günleri, Ankara, Turkey, 3 - 04 June 2010

## Supported Projects

Çıbık A. B., Kaya Merdan S., TÜBİTAK Project, Manyetik Alan Etkisi Altındaki Çift Yayınimli Doğal Konveksiyon Problemi

İçin İkinci Mertebe Zaman Adımlaması Yöntemleri Ailesi, 2019 - 2020

Çıbık A. B. , EU Supported Other Project, Ankara daki Genç Sağlık Ara Elemanlarının İstihdamı, 2009 - 2009

## Citations

Total Citations (WOS):105

h-index (WOS):4