

# CURRICULUM VITAE

as of December 2010

MEHMET TURAN

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## PERSONAL INFORMATION

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Date of Birth            April 20, 1980  
Place of Birth            Diyarbakır - Turkey

## EDUCATION

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2002 - 2009            Middle East Technical University (METU), Ankara, TURKEY  
**Ph.D:** Graduate School of Natural and Applied Sciences  
**Title:** New classes of differential equations and  
Bifurcation of Discontinuous Cycles  
**Supervisor:** Prof. Dr. Marat Akhmet

1997 - 2002            Middle East Technical University  
**B.S:** Mathematics

## EMPLOYMENT

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12.11.2010 - present    Assist. Prof. Dr.:  
Atilim University  
Department of Mathematics  
06836, Ankara, TURKEY

18.09.2008 - 11.11.2010    Instructor:  
Atilim University  
Department of Mathematics  
06836, Ankara, TURKEY

04.10.2002 - 15.08.2008    Teaching Assistant:  
Middle East Technical University (METU)  
Department of Mathematics  
06531, Ankara, TURKEY

## ADMINISTRATIVE DUTIES

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08.10.2010 - present    Vice President

Atilim University  
 Department of Mathematics  
 06836, Ankara, TURKEY

## RESEARCH INTERESTS

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- Ordinary Differential Equations
- Impulsive Differential Equations
- Functional Differential Equations
- Discontinuous Dynamical Systems
- Time Scale Calculus

## PUBLICATIONS

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- **International Journal Paper**

- IJP 5. M. U. Akhmet, **M. Turan**, *Bifurcation in a 3D Hybrid system*, Communications in Applied Analysis, July & October, **14** (3 & 4) (2010) 311-324.
- IJP 4. M. U. Akhmet, D. Aruğaslan, **M. Turan**, *Hopf bifurcation for a 3D Filippov system*, Dynamics of Continuous, Discrete and Impulsive Systems, Series A: Mathematical Analysis **16** (2009) 759-775.
- IJP 3. M. U. Akhmet, **M. Turan**, *Bifurcation of three-dimensional discontinuous cycles*, Nonlinear Analysis: Theory Methods and Applications **71** (2009) e2090-e2102 (SCI).
- IJP 2. M. U. Akhmet, **M. Turan**, *Differential equations on variable time scales*, Nonlinear Analysis: Theory Methods and Applications **70** (2009) 1175 - 1192 (SCI).
- IJP 1. M. U. Akhmet, **M. Turan**, *The differential equations on time scales through impulsive differential equations*, Nonlinear Analysis: Theory Methods and Applications **65** (2006) 2043-2060 (SCI).

- **International Conference Paper**

- ICP 1. M. U. Akhmet, **M. Turan**, *A new class of differential equations: systems on variable time scales with transition conditions*, Proceedings of Dynamic Systems and Applications, Dynamic Publishers, Inc., USA, Volume-5, 2008, pp. 21-27, Edited by G. S. Ladde, N. G. Medhin, Chuang Peng and M. Sambandham.

## CONFERENCE PARTICIPATIONS

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- **International Conferences**

- IC 6. Fourth International conference on Neural, Parallel and Scientific Computations, Atlanta, Georgia, USA, August 11 - 14, 2010  
**Talk:** Bifurcation in a 3D Hybrid System

IC 5. Workshop on Hybrid Dynamical Systems, University of Waterloo, Ontario, Canada, July 29 - 31, 2010

**Talk:** Bifurcation in a 3D Hybrid System

IC 4. Fifth World Congress of Nonlinear Analysts, Florida, USA, July 2 - July 9, 2008

**Talk:** Hopf Bifurcation in 3-Dimensional discontinuous dynamical systems

IC 3. Fifth International Conference on Dynamic Systems and Applications, Morehouse College, Atlanta, Georgia, USA, May 30 - June 2, 2007

**Talk:** Differential equations on variable time scales

IC 2. International Conference on Hybrid Systems and Applications, Lafayette, Louisiana, USA, May 22 - May 26, 2006

**Talk:** The differential equations on time scales with transition conditions

IC 1. The First International workshop on Dynamic Equations on Time Scales, Bahçeşehir University, İstanbul, Turkey, June 26 - July 01, 2005

• **National Conferences**

NC 2. V. Ankara Matematik Günleri Sempozyumu, TOBB ETU, Ankara, 3 - 4 Haziran 2010

NC 1. III. Ankara Matematik Günleri Sempozyumu, Ankara Üniversitesi, 22-23 Mayıs 2008

**Talk:** Differential equations on variable time scales

REFEREEING

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- Applied Mathematics Letters
- Dynamic systems and applications
- Electronic Journal of Differential Equations
- Nonlinear Analysis: Theory, Methods and Applications

AWARDS AND GRANTS

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02.06.2010 Best Thesis Award, METU

01.10.2006 - 01.10.2008 Tubitak Grant 106T418 (Ankara)

PROFESSIONAL MEMBERSHIPS

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- American Mathematical Society (AMS)

LANGUAGES

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- Turkish
- English (Fluent)
- German (Basic)

## CITATIONS (EXCLUDING SELF-CITATIONS)

- [IJP 3]
  - ◊ M. Akhmet, *Principles of Discontinuous Dynamical Systems*, Springer, New York, 2010.
- [IJP 2]
  - ◊ M. Akhmet, *Principles of Discontinuous Dynamical Systems*, Springer, New York, 2010.
  - ◊ M. U. Akhmet, C. Büyükadalı, *Differential equations with state-dependent piecewise constant argument*, *Nonlinear Analysis: Theory, Methods and Applications* **72** (2010) 4200 - 4210.
- [IJP 1]
  - ◊ M. Akhmet, *Principles of Discontinuous Dynamical Systems*, Springer, New York, 2010.
  - ◊ M. U. Akhmet, C. Büyükadalı, *Differential equations with state-dependent piecewise constant argument*, *Nonlinear Analysis: Theory, Methods and Applications* **72** (2010) 4200 - 4210.
  - ◊ G. Tr. Stamov, J. O. Alzabut, *Almost periodic solutions for abstract impulsive differential equations*, *Nonlinear Analysis: Theory, Methods and Applications* **72** (2010) 2457-2464.
  - ◊ H.-Y. Lan, *Existence and uniqueness results for nonlinear first-order implicit impulsive integro-differential equations with monotone conditions*, *Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis* **17** (2010) 19-30.
  - ◊ H.-F. Huo, W.-T. Li, S. Tang, *Dynamics of high-order BAM neural networks with and without impulses*, *Applied Mathematics and Computation* **215** (2009) 2120-2133.
  - ◊ H.-Y. Lan, Y.-S. Cui, *On the existence of solutions for nonlinear first-order implicit impulsive integro-differential equations*, *Nonlinear Analysis: Theory, Methods and Applications* **71** (2009) 1670-1677.
  - ◊ H.-Y. Lan, *Monotone method for a system of nonlinear mixed type implicit impulsive integro-differential equations in Banach spaces*, *Journal of Computational and Applied Mathematics* **222** (2008) 531-543.
  - ◊ F. Weizhen, L. Yubin, *Stability of quasi-linear differential equations with transition conditions*, *Electronic Journal of Differential Equations*, Vol. 2008(2008), No. 110, pp. 1-11.
  - ◊ J. Alzabut, T. Abdeljawad, *An exponential estimate for solutions of linear impulsive delay differential equations*, *Kuwait Journal of Science and Engineering* **34** (2007) 39-56.

## TEACHING EXPERIENCE

- Calculus I, II
- Linear Algebra I, II
- Differential Equations
- Discrete Mathematics and Combinatorics

LECTURES THOUGHT IN THE LAST TWO YEARS

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- **2009-2010 Summer**

- ◊ Math 152 Calculus II

- **2009-2010 Spring**

- ◊ Math 158 Extended Calculus II

- ◊ Math 102 Calculus for Management and Economics Students

- **2009-2010 Fall**

- ◊ Math 157 Extended Calculus I

- **2008-2009 Summer**

- ◊ Math 152 Calculus II

- **2008-2009 Spring**

- ◊ Math 112 Discrete Mathematics and Combinatorics

- ◊ Math 158 Extended Calculus II

- **2008-2009 Fall**

- ◊ Math 157 Extended Calculus I

- ◊ Math 276 Differential Equations

REFERENCES

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**Available upon Request**