

## Appendix I: UTK Math Faculty: Areas and Strengths

### Areas in the UTK Mathematics Department

#### Algebra and Combinatorics

Finotti (2006)  
 Tzermias (2001)  
 Mulay (1982)  
 Anderson (1976)  
 Dobbs (1975)  
 Wagner (1969)

#### Analysis

Lind (2010)  
 Nicoara (2007)  
 Frazier (2006)  
 Richter (1988)  
 Sundberg (1979)  
 Stephenson (1976)

#### Applied and Computational Math

Day (2010)  
 Xing (2009)  
 Wise (2007)  
 Schulze (1999)  
 Collins (1993)  
 Feng (1993)  
 Karakashian (1980)  
 Alexiades (1978)

#### Differential Equations

Phan (2012)  
 Denzler (2001)  
 Todorova (2001)  
 Lenhart (1981)  
 Simpson (1978)  
 Hinton (1970)

#### Geometry and Topology

Schwartz (2009)  
 Brodskiy (2003)  
 Conant (2003)  
 Plaut (1992)  
 Freire (1991)  
 Thistlethwaite (1988)  
 Dydak (1984)  
 Daverman (1967)

#### Probability

Maroulas (2010)  
 Chen (2000)  
 Xiong (1993)  
 Rosinski (1985)  
 Rajput (1972)

## Selected Faculty Research Recognition

### National and International Recognition

- Elected Fellows of the AAAS (American Association for the Advancement of Science): Robert Daverman (2009), Lou Gross (2009), Suzanne Lenhart (2010), Ken Stephenson (2011). The AAAS is the largest national scientific organization. In 2009 there were only 6 mathematicians elected fellows of the AAAS, and in 2011 there were 8.

- Elected Fellows of the IMS (Institute of Mathematical Statistics): Jan Rosinski (1997), Xia Chen (2008) The IMS is the premiere international organization in the fields of probability and statistics. In 2008 there were 17 elected IMS fellows worldwide.

- Elected SIAM (Society of Industrial and Applied Mathematics) Fellow: Suzanne Lenhart (2011)

- AMS (American Mathematical Society) Regional Meeting Plenary Lecture: Robert Daverman (1975), David Anderson (1998), Sergey Gavrillets (2007), Stefan Richter (2010) There are at most 32 AMS regional meeting plenary lectures annually.

- Sonia Kovalevsky Lecture: Suzanne Lenhart (2010) Dr. Lenhart is the 8<sup>th</sup> individual to ever give the Sonia Kovalevsky Lecture, which is presented at the SIAM Annual Meeting.

### University Recognition

- Chancellor's Research and Creative Achievement Award: William Wade (1991), Morwen Thistlethwaite (1993), Suzanne Lenhart (1994), Jan Rosinski (1999), Lou Gross (1999), Sergey Gavrillets (2001), Stefan Richter (2011) Currently 4 of these awards are given annually.

- Chancellor's Professional Promise in Research and Creative Achievement: James Conant (2009) Four awards are given annually.

- UT Notable Woman Award: Suzanne Lenhart (2010) This award is given to one faculty member, once every three years.

- Appointed UTK Chancellor's Professor: Suzanne Lenhart (2011) There are currently 12 UTK Chancellor's Professors.

### College of Arts and Sciences Recognition

- Senior Research/Creative Achievement Award: Suzanne Lenhart (2006), Ken Stephenson (2008), Xiaobing Feng (2010) There are 1 or 2 of these awards given annually by the College.

- Junior Research/Creative Achievement Award: James Conant (2007), Steve Wise (2010) Two of these awards are given annually.

## Selected Highlights of Senior Faculty Strengths by Area

**Algebra** David Anderson and David Dobbs are the two senior leaders in the department in algebra. David Dobbs is by far the most prolific writer of journal articles, with more than 350 published papers. David Anderson has been honored by giving an AMS Regional Meeting Plenary Lecture in 1999. There was a conference in Korea in 2009 in honor of David's and his brother's work, and there was a special session at the annual AMS meeting in their honor, also in 2009.

**Analysis** Ken Stephenson, AAAS Fellow, is a world leader in the area of circle-packing and discrete geometry. Longtime collaborators Carl Sundberg and Stefan Richter published a paper in the *Annals of Mathematics*, the most prestigious journal in mathematics, in 2009, one of only a half dozen or so papers ever published in this journal by a UT faculty member.

**Differential Equations** Don Hinton has had a long career as an authority on the spectral theory of Ordinary Differential Equations, a focus of the UTK Mathematics Department at the time of John H. Barrett. Suzanne Lenhart, AAAS Fellow, is a leader in the application of differential equations to biology, and recently authored a text on that subject. She is a SIAM Fellow and a Chancellor's Professor. Grozdna Todorova has a worldwide reputation for her work in nonlinear hyperbolic Partial Differential Equations.

**Geometry/Topology** Bob Daverman, AAAS Fellow, has had a long and distinguished career. Morwen Thistlethwaite is well-known for his expertise in knot theory, in particular for his 1993 paper resolving the 100 year old Tait flyping conjecture. Jerzy Dydak has a very extensive and distinguished publication record in topology. Alex Freire has published two papers in *Inventiones Math.*, one of the most prestigious mathematics journals.

**Numerical and Applied Mathematics** Ohannes Karakashian is an established authority on Discontinuous Galerkin methods in numerical analysis. Xiaobing Feng has a superb publication and grant record, especially in recent years. Tim Schulze is a leader in mathematical materials science, as evidenced by his PI NSF grant, and his NSF FRG grant with faculty members at Brown and Michigan.

**Probability** Two of our probability and stochastics faculty, Jan Rosinski and Xia Chen, are elected fellows of the IMS, and both have outstanding records of publication in the most prestigious journals in their field. Jie Xiong has an outstanding publication record, a recent text, and a current NSF PI grant.