Umut Caglar

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EDUCATION

Case Western Reserve University, Cleveland, Ohio

- **Ph.D. in Mathematics**   2010-2014
  Thesis: Divergence and entropy inequalities for log concave functions
  Advisers: Elisabeth M. Werner and Stanislaw J. Szarek
- **M.S. in Mathematics**   2008-2010
  Thesis: Floating bodies
  Adviser: Elisabeth M. Werner

Cukurova University, Adana, Turkey   2001-2005

- **B.S. in Mathematics**

PUBLICATIONS

- **U. Caglar** and E. M. Werner. "Divergence for s-concave and log-concave functions."
  Advances in Mathematics 257, pages: 219-247 (2014).

- **U. Caglar** and E. M. Werner. "Mixed f-divergence and inequalities for log-concave functions."
  Proceedings of the London Mathematical Society 2014; doi: 10.1112/plms/pdu055

- **U. Caglar**, M. Fradelizi, O. Guedon, J. Lehec, C. Schütt and E. M. Werner. "Functional version of Lp-affine surface area and entropy inequalities."
  International Mathematics Research Notices 2015; doi: 10.1093/imrn/rnv151

- **U. Caglar** and D. Ye. "Orlicz affine isoperimetric inequalities for functions." Submitted.
  arXiv:1506.02974 (2015)

TEACHING EXPERIENCE

Case Western Reserve University
Department of Mathematics, Applied Mathematics, & Statistics

- Lecturer   Summer 2015
  Teaching Elementary Differential Equations
- Lecturer   Fall 2014 & Spring 2015
  Taught three sections of Calculus for Science and Engineering III

- Graduate Student Instructor   Fall 2013
  Taught Calculus for non-science majors

- Graduate Student Teaching Assistant   2008-2013
  Tutoring & grading various undergraduate and graduate courses

RESEARCH INTERESTS

Convex geometry, geometric analysis, and geometric functional analysis

SCHOLARSHIPS &AWARDS

- Graduate student travel award from American Mathematical Society   October 2013
- Visiting scholar, Kiel University in Germany   May 2013
- Graduate assistantship (tuition, fees, monthly stipend),   2010-2014
  Mathematics Department, Case Western Reserve University
- Graduate scholarship (tuition, fees, monthly stipend)   2008-2014
  by Turkish Government for M.S. and Ph.D. degrees in USA
- Ranked first among the class of 2005 of the Cukurova University   2005
  Department of Mathematics (Valedictorian)

CONFERENCES

Invited Talks

- American Mathematical Society Meeting, San Francisco State University   October 2014
  "Mixed f-divergence and inequalities for log concave functions"
- Analysis Seminars, Kent State University   May 2014
  "Divergence and Entropy inequalities for log concave functions"
- American Mathematical Society Meeting, Washington University   October 2013
  "Divergence for s-concave and log concave functions"
- Asymptotic Geometric Analysis II   June 2013
  Euler International Mathematical Institute, St. Petersburg, Russia
  "Divergence for log concave functions"

Conferences and Workshops

- Information Theory and Concentration Phenomena, IMA, Minneapolis, MS   April 2015
- Joint Mathematics Meetings, San Antonio, TX   January 2015
- Interplay of convex geometry and Banach space theory, Banff, Canada   March 2013
- Informal analysis seminars, Kent State University   November 2012
- Invariants in convex geometry and Banach space theory, AIM, Palo Alto, CA   August 2012
- Workshop on Convexity and Asymptotic Geometric Analysis   April 2012
  at CRM and University of Montreal, Canada
- Informal analysis seminars, Kent State University   March 2012
- Perspectives in High Dimensions, Case Western Reserve University   August 2010

Posters

- Poster presentation, Information Theory and Concentration Phenomena   April 2015
  IMA, Minneapolis, MS   "Divergence for log concave functions"

- Poster presentation, Informal analysis seminars, Kent State University   March 2014
  "Divergence for log concave functions"

TECHNICAL SKILLS

LATEX, MATLAB, MATHEMATICA

ORGANIZATIONS

- Case Western Reserve University
  President, Union of Turkish Student Association   2009-2011
- Cukurova University
  President, Math Club   2003-2005

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- American Mathematical Society
- Society for Industrial and Applied Mathematics
- Mathematical Association of America