

Curriculum vitae of Prof. Dezső Miklós

PERSONAL INFORMATION

Family name, First name: Miklós, Dezső
Date of birth: October 28, 1957
URL for web site: <http://www.renyi.mta.hu/~dezso/>

• EDUCATION

1984-1986 PhD degree in Combinatorics
Ohio State University
Thesis: Some results related to a conjecture of Chvatal
1977-1982 Master degree in Mathematics
Eötvös Loránd University of Sciences, Budapest

• CURRENT POSITION(S)

2001 - Hungarian Director of the program
Budapest Semester in Mathematics program (BSM is a joint study abroad program with St. Olaf College offered for American and Canadian undergraduates in their junior or senior years having mathematics major)
1996 - Scientific Deputy Director (responsible for project planning, applications and management, budget and planning, applications of research, infrastructural investment)
Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences
1990 - Professor
Budapest Semester in Mathematics program
1984 - Research fellow
Department of Combinatorics, Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences

• PREVIOUS POSITIONS

2001-2002 Interim director
PhD program in Mathematics at the Central European University (CEU is a Budapest (Hungary) based, USA (New York State) accredited postgraduate university establishing Master and PhD programs in social sciences, humanities and sciences)
1999-2000 Acting Director
Budapest Semester in Mathematics program
1994-1995 Head of Department
Department of IT Services, Alfréd Rényi Institute of Mathematics, Hungarian Academy of Sciences
1985-86 Teaching Assistant
Ohio State University, Department of Mathematics
1984-85 University Fellow
Ohio State University, Department of Mathematics

- **AREAS OF RESEARCH ACTIVITIES**

- (1) Combinatorics
- (2) Extremal set theory
- (3) Coding theory
- (4) Cryptography and cryptology
- (5) Data base theory
- (6) Mathematical foundations of AI
- (7) Mathematical foundations of Networks

- **FELLOWSHIPS, GRANTS**

National research projects:

1. Several Hungarian OTKA (National Scientific Research Fund) and AKP (Academic Research Program – administrated by the Hungarian Academy of Sciences) projects in combinatorics and information theory, participant or co-ordinator (1990-recent)
2. Several bilateral (Hungarian – other countries) research grants financing mobility, participant or co-ordinator (1993-recent)

National research and development projects:

3. Several Hungarian projects for Funding state-of-the-art R&D infrastructure investment, financed by OTKA (National Scientific Research Fund) or OMFB (National Technical Development Council), co-ordinator (total project value is about 200.000 euros) (1987-recent)
4. Applied Research and Development grant of OMFB (National Technical Development Council) 1997-1999 “Mathematical modelling of curtain cutting”, co-ordinator (total value 70.000 euros)
5. National Research and Development Grant by the Research and Development Division of the Ministry of Education, 2001-, “Digital watermarking”, co-ordinator (total value 1.000.000 euros)
6. National Office for Research and Technology, Competitive Industry project “TUDORKA7” Development of a Knowledge Management Tool Integrating Linguistic and Graph Theory Methods for Hungarian and Community Customs Authorities, local co-ordinator (total value 3.000.000 euros)
7. Member of the project board of the Artificial Intelligence National Laboratory
8. Leader of the Rényi’s research team in the National Laboratory of Health Security

International projects:

9. National co-ordinator of the EUROMATH project (1994-1997)
10. EU 5th Framework Program, «High Level Scientific Conferences», FININF (2001) acting co-ordinator
11. EU 5th Framework Program, «Confirming the international role of Community research», call: “Support for Centres of Excellence”, 413000 euros, ICA1-1999-70112, 2001-2003, “Mathematics in Information Society”, co-ordinator

- **AWARDS**

- 1982 Rényi Kató Prize
1996 Bolyai Scholarship
2009 Gold Cross of Merit of the Hungarian Republic

- **TEACHING ACTIVITIES**

- 1990 - Professor (Budapest Semesters in Mathematics, taught courses: introductory and advanced Combinatorics)
- 1987- 90 Lecturer (Eötvös Loránd University of Sciences, Budapest, taught courses: Combinatorics and Algebraic Combinatorics)
- 1985 - 86 Teaching Assistant (Ohio State University, taught courses: undergraduate calculus)
- 1981 - 84 Instructor (Eötvös Loránd University of Sciences, Budapest, taught courses: Combinatorics)

- **ORGANISATION OF INTERNATIONAL SCIENTIFIC CONFERENCES**

- 2022 Rényi100 (co-chair)
- 2018 Building Bridges II (co-chair)
- 2013 Erdős Centennial (chair)
- 2011 Gyula O.H. Katona is 70 (chair)
EuroComb'11
- 2010 The Mathematics of Vera Sós
A Conference in honor of the 70th birthday of Endre Szemerédi
- 2008 Fete of Combinatorics and Computer Science,
Building Bridges, honouring the 60th birthday of Laci Lovász,
- 2006 Horizon of Combinatorics EMS Summer School and Conference
FoIKS 2006 Foundations of Information and Knowledge Systems
Large-Scale Random Graph Methods (chair)
- 2005 Workshops on Graph colorings and Combinatorial search
- 2004 Conference on Extremal Combinatorics and Workshop on Algebraic and Geometric Methods in Combinatorics
- 2001 Workshop and Conference on Hypergraphs (Gyula O.H. Katona is 60)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2007-2013 Vice President of the Hungarian Bioinformatic Society
- 2011-2017 Vice President of the Bioinformatics Committee of the Hungarian Academy of Sciences
- 2013- member of the board of the Hungarian Bioinformatic Society
- 2009- Vice President of the Applied Mathematics Section of the Janos Bolyai Mathematical Society

- **MAJOR COLLABORATIONS**

- 2008 European Bioinformatics Institute, Hinxton, UK
- 2007 University La Sapienza, Rome, Italy
- 2006 Queen Mary College, University of London, London. UK
- 2000 - 2001 University of Grenoble, France
- 1993 – 1994 University of Grenoble, France
- 1991 Mathematical Institute of the Korean Academy of Sciences, Phenjan, North-Korea
- 1990 Indian Institute of Science, Bangalore, Indian Statistical Institute, Calcutta and Delhi, Tata Institute of Fundamental Research, Bombay, INDIA

1989 Mathematical Institute of the Cuban Academy of Sci., Havana, Cuba
1989 University of Bonn, Germany
1987 University of Grenoble, France
1987 University of Paris VI (Pierre and Marie Curie University), Paris, France
1987 Banach School of Mathematics, Warsaw, Poland
1986 University of Santiago de Chile, Chile

- **PROFESSIONAL SERVICE**

2002-2020 Editor of *Studia Scientiarum Mathematicarum Hungarica*
2002-2020 Series Editor of the book series: “Bolyai Society Mathematical Studies”
published by Bolyai Society joint with Springer-Verlag (Berlin/Heidelberg)

- **SELECTED PUBLICATIONS**

D. Miklós, *Linear binary codes with intersection properties*, *Discrete Appl. Mathematics*, 9 (1984) pp. 187–196. 0.557

N. Manickam, D. Miklós, *On the number of non-negative subsums of a non-negative partial sum*, in *Combinatorics* (eds.: A. Hajnal, L. Lovász, V. T. Sós), *Colloquia Mathematica Societatis János Bolyai*, 52 (1988) pp. 385–392.

J. Demetrovics, G. O. H. Katona, D. Miklós, O. Seleznev, B. Thalheim: *Asymptotic properties of keys and functional dependencies in random databases*, *Theoretical Computer Science*, 190 (1998), 151–166.

D. Miklos, *Subsums of a finite sum and extremal sets of vertices of the hypercube*, *Horizons of Combinatorics* (eds.: E. Györi, G.O.H. Katona, L. Lovász), *Bolyai Society Mathematical Studies vol 17*, Springer, Heidelberg, 2008, pp. 141-161.

J. Demetrovics, G. O. H. Katona, D. Miklós: *Functional dependencies distorted by errors* *Discrete Applied Mathematics* 156(2008), no. 6, pp. 862-869.