CURRICULUM VITAE OF ÁKOS G. HORVÁTH

Personal information

Born in July 19, 1960, Budapest (Hungary).
Married, 5 children, 11 grandchildren.
Citizen and permanent resident of Hungary.
Mailing address:
Ákos G.Horváth
Department of Geometry, Institute of Mathematics,
Budapest University of Technology and Economics
Budapest, Egry József u. 1.
H-1111 Hungary
Phone: (36-1)-463-2645,
Homepage: http://geometria.math.bme.hu/g-horvath-akos
E-mail: ghorvath@math.bme.hu

Education & Scientific Degrees

1979 – 1984 Studies in Mathematics at Eötvös Loránd University, Budapest
1988 Doctor of natural sciences in geometry at Eötvös Loránd University
1995 Candidate of Mathematical Sciences in geometry at the Hungarian Academy of Science (CSc)
1995 PhD at Budapest University of Technology and Economics
2018 Doctor of the Hungarian Academy of Sciences
2018 Obtained the degree Dr. Habil. at Budapest University of Technology and Economics

Honors & prizes

1983   Presentation of my results in the National Scientific Conference of Students.
1985   2-nd prize for the results presented in the National Scientific Conference of Students
1998   Won the Julius Strommer prize of the J.Strommer International Foundation of Geometry
1999   On the opinion of students won the "Theacher of the year" prize giving by ERSTE.

Positions

Dept. of Geometry, Institute of Mathematics, Budapest University of Technology and Economics
1984-1987   Teaching assistant
1987-1995   Assistant professor
1995-2019   Associate professor
2007-   Head of the Department of Geometry
2018 aug. 1- 2018 okt.31 Acting Director of the Mathematical Institute
2018 nov. 1- 2021 okt.31 Director of the Mathematical Institute
2019-   Full professor

1984-1989: Practice from geometry of mathematics majors and chemistry majors students at Eötvös Loránd University, Budapest

1996-1997**:** Courses and practice from Mathematical Analysis and Linear Algebra at Corvinus University of Budapest

Teaching experience

- Courses for students: For mathematics majors**:** Geometry, Combinatorial geometry, Discrete geometry, Non-Euclidean geometry
- For engineer students: Mathematics, Geometry, Descriptive Geometry
- Instructions of Phd and graduate students, BSc and Msc Thesis in Math.

Graduate Students

- Tóth Dávid Csaba (1998-2000) BME, PhD (Swiss Federal Institute of Technology Zürich) in 2002.
- Végh Attila (2002-2006) BME, PhD in 2006.
- Juhász Máté Lehel (2015-2016) BME, PhD (University of Geneva, advisor András Szenes) in 2016.

Professional Activities

- Reviewer of Zentralblatt für Mathematik. (1984—2000)
- Member of the editorial board of Studies of the University of Zilina (1996-)
- Associated member of the Alfréd Rényi Institute of Mathematics of Hungarian Academy of Sciences (1996-2010)
- Member of the curatorium of Rényi Kató fellowship (2000-)
- Member of the Organizing Committee of the Discrete Geometry Days organized at the Budapest University of Technology and Economics in June 21-24, 2016, Budapest
- Member of the editorial board of Mathematical Sciences and Applications E-Notes (2017-)
- Member of the Organizing Committee of the 2nd Discrete Geometry Days organized at the Budapest University of Technology and Economics in July 8-12, 2019, Budapest
- Member of the Topic editorial board of Mathematics (2021-)

Scholarship

Bolyai János Scholarship (2000), granted by the Hungarian Academy of Sciences.

Research areas

Geometry of numbers, discrete and convex geometry, non-Euclidean and Minkowski geometry, geometric topology

Lectures in conferences:

- On the connection of bases of n-lattices, reduced by Minkowski and reduced by Hermite- PD'85, Budapest, 1986.
- On the basis reduction problem -PD'86, Budapest, 1986.
- On the nearest latticepoint problem."Geometrie und Anwend." 7.tagung, Holzhau Berlin DDR, 1989.
- Densest ball packings by orbits of the 10 fixed point free Euclidean Space groups 6.Österreichisch-Ungarische Geometrietagung, Szombathely, 1990.
- On the number of minima of N-lattices, Conference on Intuitive Geometry, Szeged, 1991.
- On a special set-group of the finite geometry EG(n,2), Konstruktive Geometrie, Balatonföldvár, 1993.
- On the Dirichlet-Voronoi cells of the unimodular lattices, Convex and Discrete geometry, Bydboszcz, Poland, 1994.
- On the Dirichlet-Voronoi cell of lattices, International Conference on Intuitive Geometry, Budapest, 1995.
- Dissections of a centrally symmetric hexagon, Konstruktive Geometrie, Balatonföldvár, 1995.
- Lower bounds of the coordinates of minimum vectors, 4th International Congress of Geometry, Thessaloniki, Greece. 1996.
- Extremal polygons with minimal perimeter, 3th Geometry Festival, Budapest, 1996.
- Bisectors in Minkowski normed spaces, Conference on Geometry, Vorrau, Austria, 2001.
- On a conjecture of G.F. Voronoi, Konstruktive Geometrie, Balatonföldvár 2001.
- Some new observations on Parallelotopes, Conference on Geometry, Vorrau, Austria, 2004.
- On the shadow boundary of a centrally symmetric convex body, Conference on Geometry, Vorrau, Austria, 2007.
- On the extended formulas of the hyperbolic plane, Szeged Geometry Day, Szeged, 2014.
- Ont he conjugate diameters of an ellipsoid – The construction of Chasles in practice. 20th Scientific-Professional Colloquium on Geometry and Graphics, Fuzine, 2017.
- Two problems on ellipsoid, Szeged Geometry Day, Szeged, 2017.
- Width on the hyperbolic plane, Szeged Geometry Day, Szeged, 2021.

Plenary lectures, invited talks:

- Problems in lattice geometry (invited talk), RWTH Aachen, Germany, 1994.
- Generalization of a theorem of G.F. Voronoi (invited talk) Osztrák-Magyar Workshop, Budapest, 1995.
- Some problems in lattice geometry (plenary lecture) Konstruktive Geometrie, Balatonföldvár 1998.
- Topological properties of the shadow boundary of a centrally symmetric convex body, (invited talk) Workshop on the 65-ith birthday of Ted Bisztriczky, 2007.
- Semi-indefinite-inner-product and generalized Minkowski spaces, (invited talk), TU Wien, Institute für Diskrete Mathematik und Geometrie, 2009.
- Semi-indefinite-inner-product and generalized Minkowski spaces, (invited talk), TU Chemnitz, Institute für Mathematik, 2010.
- Premanifolds in Minkowski spaces (invited talk), TU Chemnitz, Institute für Mathematik, 2011.

- Volume of convex hull of two bodies and related problems (plenary lecture), Geometry and Symmetry conference, Veszprém 2015.
- Constructive curves in non-Euclidean planes (plenary lecture), 19-th Scientific-Professional Colloquium on Geometry and Graphics, Starigrad-Paklenica, 2016
- On convex bodies that are characterizable by volume function, Conference on Geometry: Theory and Applications, 3–7 June , University of Innsbruck, Austria, 2019.

Grants

- 1991-1994 OTKA (National Research and Science Foundation) 1615 (team member)
- 1994 III.1-1994 III.22 TEMPUS Mobility Grant, guest researcher in Aachen)
- 1993-1996 OTKA T7351 (team member)
- 1996-1999 OTKA T020498 (team member)
- 2002-2006 OTKA T038397 (team member)
- 2010 I.4-2010 II.4 DFG (Deutsche Forschungsgemeinschaft), guest researcher in Chemnitz
- 2011 III.11-2011 III.25 DFG (Deutsche Forschungsgemeinschaft), guest researcher in Chemnitz

Publications

Over 65 research papers, two books and one printed lecture notes authored. Topics covered include Euclidean and non-Euclidean geometries, convex, combinatorial and discrete geometry.