

Curriculum vitae Tamás Szőnyi

Personal

Born: July 23rd, 1957, Budapest, Hungary

Family: married with two daughters, Anna (08.02.85.) and Márta (02.08.88.) and a son, Mihály (08.11.96.). My wife, Krisztina Biró is a physician.

Citizen and permanent resident of Hungary.

Education, degrees

Studied mathematics at Eötvös University, Budapest, 1976-1981

Degrees: Diploma (M. Sc.) in mathematics at Eötvös University, Budapest, 1981. Diploma Thesis title: “The geometry of the Mathieu groups”. Thesis adviser: Prof. Ferenc Kárteszi.

Ph. D. degree in mathematics at Eötvös University, Budapest, 1987. Doctoral Thesis title: “Complete arcs in Galois geometries”. Thesis adviser: Prof. Ferenc Kárteszi.

Candidate of Mathematical Sciences degree of the Hungarian Academy, 1991. Thesis title: “Asymptotic results in finite geometries”. Thesis adviser: Prof. László Lovász.

Doctor of the Hungarian Academy, 2001. Thesis title: “Combinatorial problems in Galois geometry”.

Positions

research assistant at Computer and Automation Institute, Hungarian Academy of Sciences, 1981-87;

research fellow of the Hungarian Academy of Sciences at the Department of Computer Science, Eötvös University, Budapest, 1987-1990;

(senior) research fellow at the Dept. of Computer Science, Eötvös Loránd University, 1990-1992;

part-time associate professor at Attila József University Szeged, 1994–1997.

associate professor at the Dept. of Computer Science, Eötvös Loránd University, 1992–2004,

part-time scientific advisor at Computer and Automation Institute, Hungarian Academy of Sciences, 2002-2013.

Current position

professor at the Dept. of Computer Science, Eötvös Loránd University, 2004–, head of the department, 2004–2009 director of the Institute of Mathematics, 2014–2017,

Head of the MTA-ELTE Geometric and Algebraic Combinatorics Research Group, 2013–

part-time professor at University of Primorska, FAMNIT, Koper, 2018–

Visiting positions

temporary visiting senior research fellow at the University of Sussex, Jan.2–Apr.2, 1989,

visiting professor of C.N.R. at the University of Basilicata (Italy), May 1988, September 1989, April 1991.

Visiting research fellow at the Technical University of Eindhoven, September–December 1990, September 2008–June 2009,

at the State University of Ghent, February–March 1991, January–July 2014.

Visiting Associate Professor at the Department of Computer Science, Yale University, Sept. 1995 – June 1996, April-May, 1999.

Visiting Research fellow, A. Rényi Math. Institute of the Hungarian Academy of Sciences, September 2001–August 2002.

Short visits: Perugia (Italy) 1993, Eindhoven, 1995, 1996, 1998,1999, Potenza (Italy) 1993, 1995, 1997, 2001.

Teaching experience

part-time teaching at Eötvös University and Technical University of Budapest, since 1981. Full time teaching at Eötvös University since 1987.

Typical courses: *Finite Geometry, Enumerative Combinatorics, Discrete Mathematics, Design Theory*. I taught several times *Mathematical Games, Graph theory, Extremal Set Systems, Coding theory* for 4th year students at Eötvös University.

I sometimes taught courses on *Group Theory, Descriptive and Projective Geometry*.

At the Technical University of Budapest I gave courses on *Mathematics* (calculus, linear algebra etc.).

Graduate students

Péter Sziklai, 1992–1995, defended CsC in 1998

András Gács, 1993–1996, defended Ph.D. in 1997

Gábor P. Nagy, 1994–1997 (Szeged), defended Ph. D. in 1999

Éva Hadnagy, 1994–1997 (Technical Univ.), defended Ph.D. in 2002

István Kovács, 1994–1997 (Szeged), defended Ph. D. in 2003

Zsuzsa Weiner, 1998–2001, defended Ph. D. in 2003

Csaba Mengyán, 1999–2002, defended Ph. D. in 2008

Nóra Viola Maloschikné Harrach, 2002–2008, defended Ph.D. in 2014

Rajkumar Sinha, 2002–2008

Bernadett Szakácsné Györey 2004–2009

Péter Csikvári (with András Sárközy and András Gács), defended Ph. D. in 2011

Tamás Héger (with András Gács), 2007–2010, defended Ph.D. in 2014

Zoltán Lóránt Nagy (with András Gács and Gyula Károlyi), 2008–2011, defended Ph.D. in 2014

Zoltán Blázsik, 2014–2019, defended Ph.D. thesis in 2020

Dániel Lenger (with Gyula Katona), 2016–

Ádám Markó, 2020–

Research interest

discrete mathematics, in particular finite geometry and related combinatorial and algebraic questions, coding theory, cryptography

Publications

91 research papers, mainly in international journals. 7 (survey type) papers and one book in Hungarian, one book (lecture notes in English). Five books (or special issues of journals) edited.

Conferences

invited (plenary) talk at the international conferences:

Giornate di Geometrie Combinatorie, Perugia, Italy, March 1992

Combinatorics'96, Assisi, Italy, Sept. 1996,

British Combinatorial Conference, QMW London, 1997.

Combinatorics'98 Mondello, PA, Italy, 1998

Combinatorics'02, Maratea PZ, Italy, 2002.

GAC3, Oisterwijk, The Netherlands, 2005.

Combinatorics'06, Ischia, Italy, 2006.

Fete of Combinatorics, Keszthely, Hungary, 2008.

Designs, Codes and Geometries, Lewes, DE, USA, 2010

Combinatorics'2010, Verbania, Italy, 2010

11th Slovenian Graph Theory Conference, Bled, Slovenia, 2011

Giornate di Geometria, Vicenza, Italy, 2012

SYGN 3, Rogla, Slovenia, 2012

Conference in honour of Frank De Clerck, Ferrara, Italy, 2012

Journées estivales de la Methode Polynomiale, Lille, France, 2013

37th ACCMCC, Perth, Australia

Combinatorics 2016, Maratea, Italy, May 2016.

Building Bridges II, Budapest, Hungary, July 2018.

Invited speaker and minisymposium organizer:

12th Slovenian Graph Theory Conference, Kranjska Gora, Slovenia, 2015

13th Slovenian Graph Theory Conference, Bled, Slovenia, 2019

Contributed talks at the following conferences:

International Conference on Finite Geometry, Deinze Belgium, 1986, 1992, 1997,

British Combinatorial Conference, London, U.K., 1987, Norwich U.K. 1989,

Combinatorics'88, Ravello, Italy, 1988, Combinatorics'90, Gaeta, Italy, Combinatorics'92, Acireale, Italy, Combinatorics'94, Pescara, Italy, Combinatorics'2000, Gaeta, Italy, Combinatorics'2004 Capomulini, Italy,

Designs and Codes, Oberwolfach, Germany 1994, 1998

and at several other conferences.

Further Oberwolfach meetings: Discrete Mathematics 2000, 2002, Finite fields 2001, Finite geometry, 2001.

I was one of the organizers of the conferences “Sets, Graphs, and Numbers”, Budapest, 1991 and “Combinatorics: Paul Erdős is Eighty”, Keszthely, 1993 and “Symmetric Structures”, Balatonlelle, 1995, “Eurocomb11”, Budapest, Hungary, 2011

Prizes

Paul Erdős Prize of the Hungarian Academy of Sciences, 1997,
Széchenyi Professorial Fellowship, 1997–2001.
Hungarian order of merit, officer’s cross, 2012.
Tibor Szele Prize of the János Bolyai Mathematical Society, 2013.
Széchenyi Prize, 2020.

Editorship

Editor of *Abh. Mat. Sem. Univ. Hamburg*, *Combinatorica*, *Innovations in Incidence geometry* (until 2021), *ELTE Annales*, and of the electronic journal *Contributions to Discrete Mathematics*, *Art of Discrete and Applied Mathematics* and *Ars Mathematica Contemporanea*. Associate editor of *Discrete Mathematics*, 2016-2019.

Membership

I am a member of the János Bolyai Mathematical Society and a fellow of the *Institute of Combinatorics and its Applications*.

Membership in Professional committees

secretary of the Mathematical Committee of the Hungarian Academy of Sciences, 1999–2005

vice president of the Mathematical Committee of the Hungarian Academy of Sciences, 2006–2011

member of the Mathematical Committee of the Hungarian Academy of Sciences, 2011–2014, 2021–

memner of the Bolyai Fellowship Committee in Mathematics, Hungarian Academy of Sciences, 2004–2010

member of the Hungarian OTKA (equivalent of NSF) Jury in Mathematics, 1998–2001,

member of the OTKA Committee on Science and Engineering, 2000–2003, 2009–2011, 2022– ,

chair of the NKFIH Mathematics and Computer Science Panel, 2018–2020,

member of the NKFIH Mathematics and Computer Science Panel, 2021.

International Projects

local coordinator of the TEMPUS Gant JEP 0153 at Eötvös University, 1991–93
Erasmus coordinator of the Institute of Mathematics I at Eötvös University, 1999–2004
Italian–Hungarian bilateral project (Geometric and algebraic structures and its application), participant, 1996–98
Italian–Hungarian bilateral project (Finite geometry and its applications), I-66/99, Hungarian project leader, 2001–2002
Slovenian–Hungarian bilateral project (Algebraic methods in graph theory and in finite geometry), SLO-10/98, Hungarian project leader, 1998–2001 (extension until March 2002), Participant in a Slovenian–Hungarian bilateral project, 2011–2012.
OTKA-NWO (Dutch–Hungarian research project, Algebraic algorithms, algebraic methods in finite geometry), N-26673, Hungarian project leader, 1999–2000
OTKA-NWO (Dutch–Hungarian research project), N-34040, participant, 2001–2003.
FWO-HAS (Flemish–Hungarian mobility Project), Hungarian project leader, 2016–
Slovenian–Hungarian mobility Project, Hungarian project leader, 2019–
Hungarian-Slovenian OTKA-ARRS Grant, NN 114614, 2015–2019.

Language skills

Mother tongue: Hungarian. Fluent in English and Hungarian, I speak and read some Italian.