

## CURRICULUM VITAE

Szilárd György Révész

Alfréd Rényi Mathematical Institute of the Hungarian Academy of Sciences  
Budapest, P.O.B. 127, H-1364, HUNGARY

Phone: (36) 1 483-8350, Home page: <http://www.renyi.hu/~revesz>, e-mail: [revesz@renyi.hu](mailto:revesz@renyi.hu)

### BACKGROUND SUMMARY

**Thirty years experience of teaching and research in mathematics. Over fifty research papers and more than a hundred invited lectures and conference presentations on a wide range of topics in analysis and number theory.**

### RESEARCH AREAS

**Approximation theory** and extremal problems in analysis [4, 5, 8, 10, 11, 13, 17, 18, 19, 23, 55, 56, 58, 59, 39, 38, 41, 42], **Fourier series** and **periodic** [8, 14, 59], **almost periodic** [6, 7, 62] and **mean periodic** [6, 16, 62] **functions**, elementary [1], algebraic and analytic **number theory** [2, 3, 5, 54, 58, 59], probabilistic methods in **Fourier analysis** [5, 7, 8, 14, 16, 23, 59], **positive definite functions** [26, 39, 40, 43], functional, in particular **difference equations** [6, 9, 54, 44], classical one variable **real analysis** [6, 12, 62], **term structure of interest rates** [60, 63], inequalities and extremal problems for **multivariate polynomials on convex bodies** [19, 20, 21, 22, 24, 26, 40, 30, 28], **polarization constants** and **polynomial inequalities** in normed spaces [22, 24, 26, 29, 25, 31, 28, 36, 37], applications of **potential theory** [24, 31, 29, 34, 33, 32, 37], functional analysis, in particular **geometry of Banach spaces**, [26, 25, 29, 34, 32, 33].

### EDUCATION AND DEGREES

- |   |      |
|---|------|
| <b>M.S. Degree</b> in Mathematics, summa cum laude<br>Supervisor: Gábor Halász;<br>Thesis: <i>Nonnegative polynomials and extremal problems with applications</i> , pp. 91,<br>Loránd Eötvös University of Sciences, Budapest | 1982 |
| <b>Ph.D. Degree</b> in Mathematics, summa cum laude<br>Supervisor: János Pintz; Thesis: c.f. [58]<br>Loránd Eötvös University of Sciences, Budapest   | 1984 |
| <b>Candidate Degree</b> in Mathematics<br>Advisor: Gábor Halász; Thesis: c.f. [59]<br>Hungarian Academy of Sciences   | 1989 |
| <b>M.B.A. Degree</b> in Economics, excellent<br>Supervisors: Zsolt Bánki and Ádám Farkas; Thesis: c.f. [60].<br>Budapest University of Economical Sciences, Budapest  | 1994 |

## EMPLOYMENT

<b>Research Staff Member</b>	1990–Present
Alfréd Rényi Mathematical Institute of the Hungarian Academy of Sciences	
<b>Associate Professor</b>	1989–1990
Department of Mathematics & Physics, GAMF College, Kecskemét	
<b>Assistant/Associate Professor</b>	1988–198
Faculty of Electrical Engineering, Technical University of Budapest	
<b>Postdoctoral Fellow</b>	1985–1988
Hungarian Academy of Sciences – Analysis Department, Eötvös University	
<b>Assistant Professor</b>	1982–1985
Analysis/Algebra & Number Theory Departments, Eötvös University	
<b>Teaching Assistant</b>	1979–1982
Mathematical Institute of Eötvös University	

## INTERNATIONAL EXPERIENCE

<b>Marie Curie Research Fellow</b>	April 2006 – August 2007
Institut Henri Poincaré, CNRS, Paris, France	
<b>Marie Curie Research Fellow</b>	April–October 2001
National Technical University of Athens, Athens, Greece	
<b>Visiting Researcher</b>	September 1993
Center for Discrete Mathematics & Theoretical Computer Science, Rutgers University	
<b>Visiting Assistant Professor</b>	Winter 1989
Dept. of Mathematics & Computer Science, California State University, Los Angeles	

## EDITORIAL WORK

- Assistant Editor** of the Conference Proceedings “*Approximation Theory*”  
Colloquia Mathematica Societatis János Bolyai, Vol. **58**,  
Elsevier, North Holland, Amsterdam – New York, 1991, 798 pages. MR 93k:41002.
- Editor** of the Conference Proceedings “*Approximation Theory and Function Series*”,  
Bolyai Society Mathematical Studies **5**,  
Bolyai Society, Budapest, 1996, 367 pages. MR 97h: 41002.

## INVITED LECTURES AND PRESENTATIONS AT CONFERENCES AND SEMINARS

**Third Workshop in Fourier Analysis**, Budapest, September 2009.

**Lecture** on the Eighth Summer School in Potential Theory, Budapest, Hungary, July 2009.

**Seminar talk** at the Institut für Biometrie und Bioinformatik, München, Germany, November 2008.

**Lecture** at the Institut für Biometrie und Bioinformatik, München, Germany, November 2008.

**Lecture** on the "Groupe de travail" **Analyse Fourier**, Paris, France, October 2008.

**Seventh Summer School in Potential Theory**, Baja, Hungary, June 2008.

**Constructive Theory of Functions**, Campos do Jordao, Brasil, June 2008.

**Seminar talk** at the Department of Applied Analysis of the Eötvös University, Budapest, Hungary, April 2008.

**Encounters between discrete and continuous mathematics**, Blaubeuren, April 2008.

**Seminar Talk** at the Université Henri Poincaré, Nancy, March 2008.

**Lecture** at the University of Edinburgh, Edinburgh, February 2008.

**Lecture** at the University of Cambridge, Cambridge, February 2008.

**Real Analysis - M60**, Budapest, February 2008.

**Seminar talk** at the University of Szeged on the Harmonic Analysis Seminar, February 2008.

**Second Workshop on Fourier Analysis**, Budapest, September 2007.

**Stechkin Summer School in Function Theory**, Aleksin, Russia, August 2007. [52].

**Lecture series** on the 6<sup>th</sup> **Summer School in Potential Theory**, Sofia, Bulgaria, July 2007, [36].

**Orthogonal Polynomials, Special Functions and Applications - OPSFA 9**, Marseille-Luminy, July 2007 [52].

**Lecture** at the Université de Lille, Lille, France, June 2007 [52].

**Lecture** at the Université de Nancy, Nancy, France, June 2007.

**Lecture** at the Université de Bordeaux 1, Bordeaux, France, June 2007.

**MathESTIA 2007**, Estia, France, April 2007.

**Lecture** on the "Groupe de travail" **Theorie Analytiques de Polynomes et Analyse Fourier**, Paris, France, April 2007 [26].

**Journées d'Analyse Fonctionnelle et Harmonique**, Lens, March 2007, [40].

**Lecture** on the "Groupe de travail" **Theorie Analytiques de Polynomes et Analyse Fourier**, Paris, France, March 2007, [26].

**Seminar talk** on the "Seminaire d'analyse fonctionnelle" at Université Paris 6, Chevaleret, Paris, France, February 2007, [34, 33, 32].

**Lecture** on the "Groupe de travail" **Theorie Analytiques de Polynomes et Analyse Fourier**, Paris, France, February 2007, [22], [36].

**Seminar Talk** at the Universidad Complutense de Madrid, Madrid, Spain, December 2006, [36].

**Journée Arithmétique**, December 2006, Paris.

**Lecture** on the "Groupe de travail" **Theorie Analytiques de Polynomes et Analyse Fourier**, Paris, France, October 2006, [38], [41].

**Workshop on Approximation Theory**, Kiten, Bulgaria, September 2006, [42].

**Pioneers of Bulgarian Mathematics**, Sofia, Bulgaria, July 2006, [43].

**Lecture series** on the 5<sup>th</sup>**Summer School in Potential Theory**, Krakow, Poland, June 2006, [31, 34, 33, 32].

**Harmonic Analysis and Related Problems - HARP 2006**, Zaros, Crete, Greece, June 2006, [42].

**Complex Functions and Fourier Analysis**, Protaras, Cyprus, May 2006, [38], [41].

**Function theory on infinite dimensional spaces IX**, Madrid, Spain, December 2005 [31, 29, 34, 33, 32].

**Seminar talk** at the Universidad Autonoma de Madrid, Madrid, Spain, December 2005 [28], [36].

**Interface between harmonic analysis and number theory**, Marseille-Luminy, October 2005.

**6<sup>th</sup> Conference on Multivariate Approximation**, Bommerholz, Germany, September 2005 [28], [36].

**Gyula Farkas Memorial Conference**, Kolozsvár-Cluj, Romania, August 2005, [34, 32].

**Partial Differential Equations and Harmonic Analysis**, Kiel, Germany, July 2005 [35].

**Computational Function Theory IV**, Joensuu, Finland, June 2005, [?, 38].

**Fejér – Riesz Memorial Conference**, Eger, Hungary, June 2005, [34, 32, 33].

**Constructive Theory of Functions**, Varna, Bulgaria, June 2005, [?, 38].

**Nikolsky-100**, Moscow, May 2005, [23, 39, 40].

**Colloquium Talk**, University of Ekaterinburg, Ekaterinburg, May 2005, [35, 8]

**Seminar Talk**, Institute of Mathematics, Ural Branch of the Russian Academy of Sciences, Ekaterinburg, May 2005, [19, 22, 30, 26, 28].

**Colloquium Talk**, Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Sofia, Bulgaria, October 2004 [19, 22, 30, 26, 28].

**Seminar Talk**, University of Sofia, October 2004 [19, 22, 30, 26, 28].

**Polynomial Inequalities**, Sozopol, Bulgaria, September 2004 [26].

**Pluripotential Theory & Applications**, Banff, Canada, September 2004 [30, 28].

**8<sup>th</sup> El Escorial Conference on Harmonic Analysis**  
El Escorial–Madrid, Spain, June 2004 [40].

**Functional Analysis and Approximation Theory**, Acquafredda di Maratea, Italy, June 2004 [40].

**Colloquium Talk** at the Universidad Autonoma de Madrid, Madrid, Spain, March 2004, [39, 40].

**Seminar Talk** at the Universidad Complutense de Madrid, Madrid, Spain, March 2004, [19, 20, 21, 22, 24, 26, 28].

**Function Theory on Infinite Dimensional Spaces VIII**,  
 Madrid, Spain, December 2003 [25, 31, 29].

**First joint Meeting of the AMS and the Math. Soc. of Spain**,  
 Sevilla, Spain, June 2003 [24].

**Colloquium Talk** at the Universidad Autonoma de Madrid,  
 Madrid, Spain, June 2003, [23, 39].

**Seminar Talk** at the Universidad Complutense de Madrid,  
 Madrid, Spain, June 2003, [24].

**Advances in Constructive Function Theory**, Vanderbilt University,  
 Nashville, TN, USA, May 2003, [23, 39].

**Colloquium Talk** at the University of North Carolina at Charlotte,  
 Charlotte, NC, USA May 2003, [25, 31, 29].

**Seminar Talk** at the University of South Carolina at Columbia,  
 Columbia, SC, USA, May 2003, [7, 8, 14].

**Colloquium Talk** at the University of Alabama at Auburn,  
 Auburn, AL, USA, May 2003, [24].

**Seminar Talk** at the Georgia Institute of Technology,  
 Atlanta, GA, USA, April 2003, [23, 39].

**Conference on Functional Analysis**,  
 Bedlewo, Poland, September 2002 [26].

**Constructive Function Theory**, Varna, Bulgaria, June 2002 [23].

**International Conference on Harmonic Analysis and Approximations II**, Nor  
 Amberd, Armenia, September 11-18, 2001 [22].

**Convex Geometric Analysis**  
 Anogia, Crete, Greece, August 18-23, 2001 [26].

**Seminar Talks** at the Mathematics Department of the  
*National Technical University of Athens*, July and October, 2001 [22, 26].

**Seminar Talks** at the Mathematics Department of the  
*University of Crete in Heraklion*, Heraklion, Crete, Greece,  
 July 5-6, 2001 [19, 22] & [7, 8].

**Computational Methods and Function Theory 2001**  
 Averio, Portugal, June 25-29, 2001 [21].

**International Conference on Analysis and Applications**,  
 Chennai (Madras), India, December 4-9, 2000 [19, 20, 21].

**Functional Analysis and Approximation Theory**,  
 Acquafredda di Maratea, Italy, September 2000 [20].

**Approximation theory and function series**,  
 Budapest, Hungary, August 1999 [20].

**Computational Methods and Function Theory '97**,  
 Nicosia, Cyprus, October 1997 [17].

**Number Theory in Progress**, Zakopane, Poland, July 1997 [17, 18].

**Approximation Theory and Functional Analysis**,  
 Acquafreda di Maratea, Italy, September 1996 [19].

**Constructive Approximation and its Appl.**, Tel Aviv, Israel, May 1994 [17, 18].  
**Number Theory Seminar Talk** at the  
*University of Illinois at Urbana-Champaign*, Urbana, September 1993 [15].  
**Analysis Seminar Talk** at the *Purdue University*,  
 West Lafayette, September 1993 [17, 18].  
**Conference in honour of Jean-Pierre Kahane**,  
 Paris, France, July 1993 [17, 18].  
**Colloquium on elementary and analytic number theory**,  
 Lillafüred, Hungary, June 1993 [15].  
**Second International Conference in Functional Analysis and Approximation  
 Theory**, Aquafredda di Maratea, Italy, September 1992 [10, 13, 18].  
**Colloquium Talk** at the Number Theory Department of the  
*Mathematical Institute of the Polish Academy of Sciences*,  
 Warsaw, Poland, March 1992 [15].  
**Approximation Theory and Function Spaces**,  
 33<sup>rd</sup> Semester of the Banach Center, Warsaw, Poland, March 1992 [14].  
**Colloquium Talk** at the Mathematics Department of the  
*University of North Carolina at Charlotte*, January 1992 [7, 8, 14].  
**Conference on Constructive Function Theory**,  
 Varna, Bulgaria, May 1991 [14].  
**Seventh Texas Symposium on Approximation Theory**,  
 Austin, Texas, January 1991.  
**Conference on Approximation Theory** of the J. Bolyai  
 Mathematical Society, Kecskemét, Hungary, August 1990 [10, 11, 13].  
**Colloquium Talk** at the Analysis Department of the  
*Université Paris-Sud*, Orsay, France, October 1989 [15].  
**Symposium on Analytic Number Theory**,  
 Amalfi, Italy, September 1989 [15].  
**Colloquium Talk** at the Department of Mathematics of the  
*University of Illinois at Urbana-Champaign*, April 1989 [8, 14].  
**Colloquium Talk** at the Department of Mathematics of  
*Purdue University at West Lafayette*, April 1989 [8, 14].  
**Colloquium Talk** at the Department of Mathematics of the  
*University of Louisville*, Kentucky, March 1989 [8, 14].  
**Southern California Functional Analysis Seminar**,  
 Los Angeles, March 1989 [8, 14].  
**Colloquium Talk** at the Mathematics Department of the  
*California State University at Los Angeles*, Los Angeles, March 1989 [7, 8, 14].  
**Sixth Texas Symposium on Approximation Theory**,  
 College Station, Texas, January 1989 [54].  
**Western Number Theory Conference**,  
 Las Vegas, December 1988 [15].

**Eleventh Summer Symposium on Real Analysis**,  
 Esztergom, Hungary, August 1987 [6, 9, 60].  
**Number Theory Conference** of the J. Bolyai  
 Mathematical Society of Hungary, Budapest, Hungary, July 1987 [5, 58].  
**Number Theory Conference** of *Laval University*,  
 Quebec, Canada, July 1987 [5, 55].  
**2<sup>nd</sup> International Workshop on Analysis and Applications**,  
 Dubrovnik–Kupari, Yugoslavia, June 1987 [7, 8].  
**Conference on Constructive Function Theory**,  
 Varna, Bulgaria, May 1987 [8].  
**Conference on Algebraic Number Theory**,  
 Kühlungsborn, Germany, November 1986 [5, 58].  
**3<sup>rd</sup> International Symposium on Functional Equations and Inequalities**, Nosz-  
 vaj, Hungary, September 1986 [6].  
**Conference on Constructive Function Theory-86**,  
 Edmonton, Canada, July 1986 [8].  
**6<sup>th</sup> Austro–Hungarian Number Theory Seminar**,  
 Vienna, Austria, May 1986 [5, 58].  
**Approximation Theory and Function Spaces**,  
 27<sup>th</sup> Semester of the Banach Center, Warsaw, Poland, April 1986 [8].  
**3<sup>rd</sup> International Conference on Complex Analysis**,  
 Varna, Bulgaria, May 1985 [23, 56].  
**5<sup>th</sup> Austro–Hungarian Number Theory Seminar**,  
 Budapest, Hungary, November 1984 [23, 56].  
**4<sup>th</sup> Austro–Hungarian Number Theory Seminar**,  
 Vienna, Austria, April 1984 [3].  
**2<sup>nd</sup> Austro–Hungarian Number Theory Seminar**,  
 Vienna, Austria, April 1983 [2].

Several lectures given at *Research Seminars* of the Analysis Department of Eötvös Univer-  
 sity, of the Complex Function Theory Department and Approximation Theory Department  
 of the Mathematical Institute of the Hungarian Academy of Sciences, of the Mathematics &  
 Physics Department of GAMF College, and of the Mathematics Department of the Faculty  
 of Mechanical Engineering of the Budapest University of Technology, from 1980 on.

## COURSES TAUGHT

Numerical Analysis  
 Introductory Probability Theory and Statistics  
 Calculus  
 Real Analysis  
 Complex Function Theory  
 Introduction to Algebra and Number Theory

Complex Function Theory Problems (Pólya–Szegő, Problems and Exercises in Analysis)  
Algebraic Number Theory (Landau, Einführung ... Ideale)  
Almost Periodic Functions (Besicovitch, Almost periodic functions, and Maak, Fastperiodische Funktionen)  
Mean Periodic Functions (Kahane, Lectures on Mean-Periodic Functions)  
Potential Theory (Helms: Introduction to Potential theory and Kellogg: Foundations of Potential Theory)

## COURSES TAUGHT IN ENGLISH

*Introduction to Number Theory* (Nathanson, Introduction to Elementary Number Theory),  
Budapest Semesters In Mathematics, 2003.  
*Topics in Number Theory* (Apostol, Introduction to Analytic Number Theory),  
Budapest Semesters In Mathematics, 2002 & 2003.  
*Introduction to Potential Theory* (In the framework of the  
First, Second and Third Summer Schools on Potential Theory) Budapest, 2002, Szeged,  
2003, & Kecskemét, 2004.  
*Calculus*, California State University at LA, 1989.  
*Advanced Calculus* (Kreyszig, Advanced Engineering Mathematics), Cal. State U. LA, 1989.

## ADVISING

Advisor of **János Dobi**, D.A. in Mathematics Education,  
during his one year scholarship at the  
Mathematical Institute of the Hungarian Academy of Sciences, 1991–92.

Faculty advisor of **Andrea Horváth** for writing her Masters Thesis  
”*Generalization of periodicity and equivalent definitions of almost periodicity*”,  
Loránd Eötvös University of Budapest, 1986.

Consultant of **Kálmán Kovács** during his work on three research papers on  
generalized periodicity and convergence of rearranged series representations, 1989-93.

Visiting consultant of **Vasilios Anagnostopoulos** and of **Alexandros Pappas** at  
the National Technical University of Athens, Greece  
during my Marie Curie Fellowship there, (cf. [31, 29]), 2001.

Scientific coordinator of **Lozko Milev** during his postdoctoral fellowship at the  
A. Rényi Mathematical Institute in 2002-2003.

Scientific coordinator of **Bálint Farkas** during his postdoctoral fellowship at the  
A. Rényi Mathematical Institute in 2003-2004.

Scientific coordinator of **Máté Matolcsi** during his postdoctoral fellowship at the  
A. Rényi Mathematical Institute in 2003-2005.

## AWARDS, PRIZES AND SCHOLARSHIPS

- "Marie Curie Intra European Fellowship"**, (Category Experienced Researcher), European Union, executed at the Institut Henri Poincaré, CNRS, Paris, France 2006-2007.
- "J. Bolyai Research Scholarship"** of the Hungarian Academy of Sciences, 2002-2005.
- "Marie Curie Fellowship"** (Category 40, experienced researcher) of the European Union, executed at the National Technical University of Athens, Greece 2001.
- "Young Researchers' Award"** of the Hungarian Acad. Sci., 1993.
- "K. Rényi Prize"** of the J. Bolyai Mathematical Society, 1<sup>st</sup> degree (for excellence in research during university studies), 1982.
- Award** of the Council of the Scientific Association of Students at Eötvös University for outstanding work in Mathematical Section, 1982.
- 1<sup>st</sup> prize** at the Conference of the Scientific Association of Students at Eötvös University (for research papers), three times 1980–1982.
- 1<sup>st</sup> prize** in the Advanced Category of the Eötvös University's annual **"F. Riesz Memorial Competition in Mathematics"**, 1982.

## MEMBERSHIPS

- Organizing Committee Secretary,  
**3<sup>rd</sup> Workshop on Fourier Analytic Extremal Problems and Approximation**, A. Rényi Institute of Mathematics, Hungarian Acad. Sci., Budapest, September 2009.
- Organizing Committee Chairman of the  
**8<sup>th</sup> Summer School in Potential Theory**, Budapest, Hungary, July 2008.
- Organizing Committee Chairman of the  
**7<sup>th</sup> Summer School in Potential Theory**, Baja, Hungary, June-July 2008.
- Organizing Committee Chairman,  
**2<sup>nd</sup> Workshop on Fourier Analytic Extremal Problems and Approximation**, A. Rényi Institute of Mathematics, Hungarian Acad. Sci., Budapest, September 2007.
- Organizing Committee co-Chairman of the  
**6<sup>th</sup> Summer School in Potential Theory**, Univ. Kliment Ohridsky, Sofia, July 2007.
- Organizer of the **Groupe de Travail en "Théorie Analytique de Polynômes et Analyse Fourier"**, Institut Henri Poincaré, CNRS, Paris, October 2006 – February 2007.
- Organizing Committee co-Chairman of the **5<sup>th</sup> Summer School in Potential Theory**, Yagiellonian University, Krakow, June–July 2006.
- Organizing Committee Chairman,  
**Workshop on Fourier Analytic Extremal Problems and Approximation**, A. Rényi Institute of Mathematics, Hungarian Acad. Sci., Budapest, September 2005.
- Organizing Committee Chairman of the **4<sup>th</sup> Summer School in Potential Theory**, University of Debrecen, Debrecen, July 2005.
- Organizing Committee Chairman of the **3<sup>rd</sup> Summer School in Potential Theory**, University of Kecskemét, Kecskemét, July 2004.

Organizing Committee Chairman of the 2<sup>nd</sup> **Summer School in Potential Theory**,  
A. Rényi Institute of Mathematics & University of Szeged, Szeged, July 2003.

Organizing Committee Chairman of the **Summer School in Potential Theory**,  
A. Rényi Institute of Mathematics, Budapest, August 2002.

Member of the *Organizing Committee of the Analysis Workshop* of the  
Alfréd Rényi Mathematical Institute of the Hungarian Academy of Sciences,  
held at Budapest, June–July 2001.

Secretary of the *Organizing Committee of the  
Analysis Workshop (Turán Conference Series V.)* of the  
Alfréd Rényi Mathematical Institute of the Hungarian Academy of Sciences,  
held at Budapest, June 2000.

Secretary of the *Organizing Committee of the  
Conference on Approximation Theory and Function Series*  
of the J. Bolyai Mathematical Society, held at Budapest, August 1995.

Secretary of the *Organizing Committee of the  
Conference on Approximation Theory* of the  
J. Bolyai Mathematical Society, held at Kecskemét, August 1990.

**J. Bolyai Mathematical Society of Hungary**, since 1981.

**Mathematical Society (?) of Japan**, 2003-2004 ?

**Société Mathématique de France**, 2006-2007.

**American Mathematical Society**, 1994-1999, 2009.

Jury of the 6<sup>th</sup> International Mathematics Competition of Czechoslovakia for university  
students, April 1986.

Jury of the "F. Riesz Memorial Competition in Mathematics", 1985–86 and 1986–87.

Jury of the State Mathematical Competition for High School Students, 1984–85, 1985–86,  
and 1986–87.

Chairman of the Program Committee of the Summer School in Number Theory (Scientific  
Association of Students at Eötvös University) in 1982.

Program Committee of the Summer School in Complex Function Theory (Scientific As-  
sociation of Students at Eötvös University) in 1980.

Chairman of the Editorial Board of *Mathematical Courier* (the periodical of the Mathe-  
matical Section of the Scientific Association of Students at Eötvös University), 1979-1982.

## LANGUAGE SKILLS

Hungarian (mother tongue),

English (fluent),

German (reading mathematical texts),

Russian (reading mathematical texts),

French (reading mathematical texts).

# LIST OF PUBLICATIONS

by Szilárd György Révész

## Publications in Refereed Journals

- [1] On the least prime in an arithmetic progression, *Studia Sci. Math. Hung.* **15** (1980), 83-87. MR 84d:10049.
- [2] Irregularities in the distribution of prime ideals I, *Studia Sci. Math. Hung.* **18** (1983), 57-67. MR 85i:11072.
- [3] Irregularities in the distribution of prime ideals II, *Studia Sci. Math. Hung.* **18** (1983), 343-369. MR 86g:11050.
- [4] Note on a problem of Q. I. Rahman and P. Turán, *Acta Math. Hung.* **44** (1984), 367-377. MR 86c:30058.
- [5] Effective oscillation theorems for a general class of real-valued remainder terms, *Acta Arith.* **49** (1988), 481-505. MR 90e:11131.
- [6] (joint with M. Laczkovich) Periodic decompositions of continuous functions, *Acta Math. Hung.* **54(3-4)** (1989), 329-341. MR 90k:26006.
- [7] On the Convergence of Fourier Series of U.A.P. Functions, *J. Math. Anal. & Appl.*, **151** (1990), 308-317. MR 91m:42029.
- [8] Rearrangement of Fourier series, *Journal of Approximation Theory*, **60** (1990), 101-121. MR 90m:42042.
- [9] (joint with M. Laczkovich) Decompositions into periodic functions belonging to a given Banach space, *Acta Math. Hung.*, **55(3-4)** (1990), 353-363. MR 92a:39003.
- [10] Some trigonometric extremal problems and duality, *J. Australian Math. Soc. (Series A)* **50** (1991), 384-390. MR 92d:42002.
- [11] A Fejér-type extremal problem, *Acta Math. Hung.* **57(3-4)** (1991), 279-283. MR 93f:42003.
- [12] (joint with I. Z. Ruzsa) On approximating Lebesgue integrals by Riemann sums, *Glasgow Math. J.* **33** (1991) 129-134. MR 92g:26011.
- [13] On a class of extremal problems, *Approximation Theory & Appl.* **7** (1991), 86-96. MR 93f:42004.
- [14] Rearrangement of Fourier series and Fourier series whose terms have random signs, *Acta Math. Hung.* **63** (1994), 395-402. MR 95f:42021.

- [15] On Beurling's Prime Number Theorem, *Periodica Math. Hung.*, **28** (1994), 195–210. MR 96c:11114.
- [16] Fourier Synthesis of Bounded Mean Periodic Functions by Rearrangement of Fourier Series, *J. Analysis*, **3** (1995), 179-188. MR 96c:42009.
- [17] Minimization of maxima of nonnegative and positive definite cosine polynomials with prescribed first coefficients, *Acta Sci. Math. (Szeged)*, **60** (1995), 589-608. MR 96k:42001.
- [18] The Least Possible Value at Zero of Some Nonnegative Cosine Polynomials and Equivalent Dual Problems, *J. Fourier Anal. & Appl.*, **Kahane Special Issue** (1995), 485-508. MR 97c:42002.
- [19] (joint with [A. Kroó](#)) On Bernstein and Markov-type inequalities for multivariate polynomials on convex bodies, *J. Approx. Theory*, **99** (1999), 134-152. MR 2000e:41026, Zbl 0952.41012.
- [20] Uniqueness of Markov-extremal polynomials on symmetric convex bodies, *Constructive Approximation*, **17** (2001), 465-478. MR 2002b:41015, Zbl 0996.41012.
- [21] Uniqueness of multivariate Chebyshev-type extremal polynomials for convex bodies, *East J. Approx.*, **7** (2001), 205-240. MR 1856822 (2002j:41026), Zbl pre05021942.
- [22] (joint with [Y. Sarantopoulos](#)) Chebyshev's extremal problems of polynomial growth in real normed spaces, *J. Contemp. Math. Anal. (Armen. Acad. Sci.)*, **36** (2001) no. 5, 59-80 (2002). MR 1964583 (2004b:41042).
- [23] (joint with [M. Kolountzakis](#)) On a problem of Turán about positive definite functions, *Proc. Amer. Math. Soc.*, **131** (2003), no. 11, 3423-3430 MR 1 990 631, Zbl 1042.42004.
- [24] (joint with [Y. Sarantopoulos](#)) On Markov constants of homogeneous polynomials over real normed spaces, *East J. Approx.*, **9** (2003), no. 3, 277-304. MR 2 009 654 (2004h:41011) (2004c:42017).
- [25] (joint with [Y. Sarantopoulos](#)) Plank problems, polarization, and Chebyshev constants, *J. Korean Math. Soc.*, **41** (2004) no. 1, 157-174. MR 2048707 (204m:46033), Zbl 1047.46036.
- [26] (joint with [Y. Sarantopoulos](#)) A generalized Minkowski functional with applications in approximation theory, *J. Convex Analysis*, **11** (2004), No. 2, 303-334. MR 2158907 (2006e:52001), Zbl 1068.46008.
- [27] On generalized strong  $A$ -summability, *Sci. Math. Jap.*, **60** no. 3 (2004), 595-611, MR 2099590 (2005h:40020), Zbl 1071.40003.
- [28] Some polynomial inequalities on real normed spaces, *Publicaciones del Dpto. de Análisis del Matemático*, Sección 1 **Núm. 63** (2004), 111-135.
- [29] (joint with [A. Pappas](#)) Linear polarization constants of Hilbert spaces, *J. Math. Anal. Appl.*, **300** (2004), 129-146. MR 2100242 (2005h:46072), Zbl 1081.46021.

- [30] (joint with L. B. Milev) Bernstein's inequality for multivariate polynomials on the standard simplex, *J. Inequalities and Appl.*, **2005:2** (2005), 145–163. MR 2173358 (2006g:41026), Zbl 1082.41010.
- [31] (joint with V. Anagnostopoulos) Polarization constants for products of linear functionals over  $\mathbf{R}^2$  and  $\mathbf{C}^2$  and the Chebyshev constants of the unit sphere, *Publ. Math. Debrecen*, **68/1-2** (2006), 63–75. MR 2213542.
- [32] (joint with B. Farkas), Rendezvous numbers in normed spaces, *Bull. Austr. Math. Soc.*, **72** (2005), 423–440. MR 2199644.
- [33] (joint with B. Farkas), Rendezvous numbers of metric spaces – a potential theoretic approach, *Archiv der Mathematik*, **86** (2006), 268–281. MR 2215316, Zbl pre05024118.
- [34] (joint with B. Farkas) Potential theoretic approach to rendezvous numbers, *Monatshefte für Mathematik*, **148** (2006), 309–331.
- [35] (joint with B. Farkas), Tiles with no spectra in dimension 4, *Math. Scand.*, **98** no. 1 (2006), 44–52. MR 2221543.
- [36] A comparative analysis of Bernstein type estimates for the derivative of multivariate polynomials *Annales Polonici Mathematici* **88.3** (2006), 229–245.
- [37] Inequalities for multivariate polynomials, *Annals of the Marie Curie Fellowships*, **4** (2006), (electronic), <http://www.mariecurie.org/annals/>.
- [38] Turán-type converse Markov inequalities for convex domains on the plane, *J. Approx. Theory*, **141** No. 2 (August 2006), 162–173.
- [39] (joint with M. Kolountzakis) On pointwise estimates of positive definite functions with given support, *Canad. J. Math.*, **58** (2) (2006), 401–418. MR 2209285.
- [40] (joint with M. Kolountzakis) Turán's extremal problem for positive definite functions on groups, *J. London Math. Soc.* **74** (2006), 475–496.
- [41] On a paper of Erőd and Turán-Markov inequalities for non-flat convex domains, *East J. Approx.* **12** No. 4 (2006), 451–467.
- [42] (joint with N. N. Reyes, G. A. M. Velasco), Oscillation of Fourier Transforms and Markov-Bernstein Inequalities, *J. Approx. Theory*, **145** (2007), 100–110.
- [43] On some extremal problems of Landau, *Serdica Math. J.*, **33** (2007), 125–162.
- [44] (joint with B. Farkas) Decomposition as the sum of invariant functions with respect to commuting transformations, *Aequationes Math.* **73** (2007), 233–248.
- [45] (joint with A. Bonami) Failure of Wiener's property for positive definite periodic functions, *Comptes Rendus Mathématique*, Volume **346**, Issues 1-2, January-February 2008, Pages 39–44.

- [46] Schur type inequalities for polynomials with no zeros in the unit disk, Volume **2007** (2007), Article ID 90526, 10 pages (electronic), doi:10.1155/2007/90526, <http://www.hindawi.com/journals/jia/volume-2007>.
- [47] (joint with B. Farkas), Positive bases in spaces of polynomials, *Positivity*, **12** # 4, November 2008, 691–709.
- [48] (joint with B. Farkas, V. Harangi and T. Keleti), Invariant decomposition of functions with respect to commuting invertible transformations, *Proc. Amer. Math. Soc.* **136**, No 4, April 2008, 1325-1336.
- [49] (joint with A. San Antolín), Equivalence of  $A$ -Approximate Continuity for Self-Adjoint Expansive Linear Maps, *Lin. Alg. Appl.*, **429**, Issue 7, 1 October 2008, 1504-1521.
- [50] (joint with D. Burns, N. Levenberg, S. Ma'u), Monge–Ampère measures for convex bodies and Bernstein–Markov type inequalities, *Trans. Amer. Math. Soc.*, to appear.
- [51] (joint with Ph. Jamming, M. Matolcsi), On the extremal rays of the cone of positive, positive definite functions, *J. Fourier Anal. Appl.*, to appear.
- [52] (joint with Aline Bonami), Integral concentration of idempotent trigonometric polynomials with gaps, *Amer. J. Math.*, **131** (2009), 1065-1108.
- [53] (joint with G. A. Munoz, J. B. Seoane), Geometry of homogeneous polynomials on non symmetric convex bodies, *Math. Scand.*, **104** (2008), 1-14, to appear.

### Refereed Conference Papers

- [54] On a theorem of Phragmen, *Proceedings of the 3<sup>rd</sup> International Conference on Complex Analysis, Varna, Bulgaria, '85*, (eds. L. Iliev, I. Ramadanov, T. Tonev) Publishing House of the Bulgarian Acad. Sci., 1986, 556-568. MR 88m:11074.
- [55] Exact inhomogeneous Bernstein inequalities, *Approximation Theory VI, Proceedings of the Sixth International Symposium on Approximation Theory, Texas A. & M. University, College Station, Texas, '89*, (eds. C. K. Chui, L. L. Schumaker, J. D. Ward), Academic Press, 1989, 557-560. MR 91k:41026.
- [56] Extremal problems and a duality phenomenon, *Approximation, Optimization and Computing*, (ed. A. G. Law & C. L. Wang), Elsevier Sci. Publ. B. V. (North Holland), 1990, 279-281. MR 93k:42002.
- [57] (joint with A. Bonami), *Concentration of the integral norm of idempotents*. In: Fractals and related fields, Proceedings of the Conference in Honor of Jacques Peyrière, 2009. 23 pages, to appear; <http://uk.arxiv.org/PS.cache/arxiv/pdf/0811/0811.4576v1.pdf>.

## Theses Papers

- [58] *Oscillatorial properties of real- and complex-valued functions having a Laplace transform of a certain type* (in Hungarian), doctoral thesis, L. Eötvös University, Budapest, 1984, 76 pages.
- [59] *Extremal problems for polynomials* (in Hungarian), thesis for the “candidate degree”, Budapest, 1988, 119 pages.
- [60] *Interest rate risk and its coverage* (in Hungarian), thesis for the M.B.A. degree, Budapest University of Economical Sciences, Budapest, 1994, 65 pages.
- [61] *Extremal problems for positive definite functions and polynomials*, dissertation for the “Doctor of the Academy” degree, Hungarian Academy of Sciences, Budapest, 2009.

## Other Publications

- [62] (joint with M. Laczkovich) Periodic decompositions of functions, *Real Analysis Exchange* **13/1** (1987–88), 126-129 & 107-108.
- [63] The risk of interest rate changes and its hedge (in Hungarian), *Vezetéstudomány (Management Science)*, **XXVI** No 7 (1995), 33-38.
- [64] Megemlékezés Erőd Jánosról, *Matematikai Lapok* 2008/1, 1-8 (in Hungarian).
- [65] In memoriam János Erőd, *History of Approximation Theory*, <http://pages.cs.wisc.edu/~deboor/HAT/erod.pdf>.
- [66] *A discrete extension of the Blaschke Rolling Ball Theorem*, preprint, 2009, see on ArXive as [arXiv:0903.4815](https://arxiv.org/abs/0903.4815), 21 pages.
- [67] *On uniform asymptotic upper density in locally compact abelian groups*, preprint, 2009, see on ArXive as [arXiv:0904.1567](https://arxiv.org/abs/0904.1567), 13 pages.
- [68] *Turán’s extremal problem on locally compact abelian groups*, preprint, 2009, see on ArXive as [arXiv:0904.1824](https://arxiv.org/abs/0904.1824), 26 pages.