

# CURRICULUM VITAE

1. **Numele:** BARICZ
2. **Prenumele:** ÁRPÁD
3. **Data și locul nașterii:** 7 Septembrie 1981, Gheorgheni, jud. Harghita
4. **Cetățenie:** română, maghiară
5. **Naționalitate:** maghiară
6. **E-mail:** [bariczocsi@yahoo.com](mailto:bariczocsi@yahoo.com), [arpad.baricz@econ.ubbcluj.ro](mailto:arpad.baricz@econ.ubbcluj.ro)
7. **Pagină web:** <https://sites.google.com/site/bariczocsi/>



## 8. Studii:

- [Oct. 2004- Dec. 2008] Doctorat în matematică, Universitatea din Debrecen.
- [Oct. 2004 – Iun. 2008] Doctorat în matematică, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Oct. 2003 – Iul. 2004] Masterat în matematică, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Oct. 1999 – Iul. 2003] Licențiat în matematică, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Sept. 1995 – Iun. 1999] Bacalaureat, Liceul Teoretic Salamon Ernő.

## 9. Experiența profesională:

Universitatea Babeș-Bolyai din Cluj-Napoca, Facultatea de Științe Economice și Gestiunea Afacerilor, Extensiunea Sfântu-Gheorghe, Catedra de Administrarea Afacerilor.

- [Febr. 2007 – Febr. 2009] Asistent universitar, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Febr. 2009 – Apr. 2014] Lector universitar, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Apr. 2014 – ] Conferențiar universitar, Universitatea Babeș-Bolyai din Cluj-Napoca.
- [Dec. 2012 – ] Cercetător, Universitatea din Óbuda, Facultatea de Informatică Neumann János, Institutul de Matematică Aplicată, Budapesta, Ungaria.

## 10. Lucrări publicate

### 10.1. Articole publicate în reviste recunoscute ISI [IF însumat: 66.524]

1. **Á. Baricz**, Functional inequalities involving special functions, *Journal of Mathematical Analysis and Applications*, 319(2) (2006), 450-459. (IF: 0.758)
2. **Á. Baricz**, Functional inequalities involving special functions II, *Journal of Mathematical Analysis and Applications*, 327(2) (2007), 1202-1213. (IF: 0.872)
3. **Á. Baricz, E. Neuman**, Inequalities involving modified Bessel functions of the first kind II, *Journal of Mathematical Analysis and Applications*, 332(1) (2007), 265-271. (IF: 0.872)
4. **Á. Baricz**, Turán type inequalities for generalized complete elliptic integrals, *Mathematische Zeitschrift*, 256(4) (2007), 895-911. (IF: 0.680)
5. **Á. Baricz**, Some inequalities involving generalized Bessel functions, *Mathematical Inequalities and Applications*, 10(4) (2007), 827-842. (IF: 0.312)
6. **Á. Baricz, L. Zhu**, Extension of Oppenheim's problem to Bessel functions, *Journal of Inequalities and Applications*, 2007 (2007), Art. 82038. (IF: 0.408)

7. **Á. Baricz**, Mills' ratio: Monotonicity patterns and functional inequalities, *Journal of Mathematical Analysis and Applications*, 340(2) (2008), 1362-1370. (IF: 1.046)
8. **Á. Baricz**, Turán type inequalities for hypergeometric functions, *Proceedings of the American Mathematical Society*, 136 (9) (2008), 3223-3229. (IF: 0.584)
9. **S. András, Á. Baricz**, Properties of the probability density function of the non-central chi-squared distribution, *Journal of Mathematical Analysis and Applications*, 346(2) (2008), 395-402. (IF: 1.046)
10. **Á. Baricz**, Geometric properties of generalized Bessel functions, *Publicationes Mathematicae Debrecen*, 73 (1-2) (2008), 155-178. (IF: 0.346)
11. **Á. Baricz**, Functional inequalities involving Bessel and modified Bessel functions of the first kind, *Expositiones Mathematicae*, 26(3) (2008), 279-293. (IF: 0.568)
12. **Y. Sun, Á. Baricz**, Inequalities for the generalized Marcum Q-function, *Applied Mathematics and Computation*, 203(1) (2008), 134-141. (IF: 0.961)
13. **Á. Baricz**, On a product of modified Bessel functions, *Proceedings of the American Mathematical Society*, 137 (1) (2009), 189-193. (IF: 0.640)
14. **Á. Baricz, S. Wu**, Sharp Jordan-type inequalities for Bessel functions, *Publicationes Mathematicae Debrecen*, 74 (1-2) (2009), 107-126. (IF: 0.646)
15. **Á. Baricz, S. Wu**, Sharp exponential Redheffer-type inequalities for Bessel functions, *Publicationes Mathematicae Debrecen*, 74 (3-4) (2009), 257-278. (IF: 0.646)
16. **Á. Baricz, Y. Sun**, New bounds for the generalized Marcum Q-function, *IEEE Transactions on Information Theory*, 55(7) (2009), 3091-3100. (IF: 2.357)
17. **Á. Baricz**, Tight bounds for the generalized Marcum Q-function, *Journal of Mathematical Analysis and Applications*, 360(1) (2009), 265-277. (IF: 1.225)
18. **S. Wu, Á. Baricz**, Generalizations of Mitrinovic, Adamovic and Lazarevic's inequalities and their applications, *Publicationes Mathematicae Debrecen*, 75 (3-4) (2009), 447-458. (IF: 0.646)
19. **Y. Sun, Á. Baricz, M. Zhao, X. Xu, S. Zhou**, Approximate average bit error probability for DQPSK over fading channels, *Electronics Letters*, 45(23) (2009), 1177-1179. (IF: 0.970)
20. **Á. Baricz**, Geometrically concave univariate distributions, *Journal of Mathematical Analysis and Applications*, 363(1) (2010), 182-196. (IF: 1.174)
21. **Y. Sun, Á. Baricz, S. Zhou**, On the monotonicity, log-concavity and tight bounds of the generalized Marcum and Nuttall Q-functions, *IEEE Transactions on Information Theory*, 56(3) (2010), 1166-1186. (IF: 2.725)
22. **Á. Baricz, B. Frasin**, Univalence of integral operators involving Bessel functions, *Applied Mathematics Letters*, 23(4) (2010), 371-376. (IF: 1.155)
23. **Á. Baricz**, Turán type inequalities for some probability density functions, *Studia Scientiarum Mathematicarum Hungarica*, 47(2) (2010), 175-189. (IF: 0.197)
24. **Á. Baricz**, Powers of modified Bessel functions of the first kind, *Applied Mathematics Letters*, 23(6) (2010), 722-724. (IF: 1.155)
25. **Á. Baricz**, Turán type inequalities for modified Bessel functions, *Bulletin of the Australian Mathematical Society*, 82(2) (2010), 254-264. (IF: 0.392)
26. **S. András, Á. Baricz**, Bounds for complete elliptic integrals of the first kind, *Expositiones Mathematicae*, 28(4) (2010), 357-364. (IF: 0.660)
27. **Á. Baricz**, Bounds for modified Bessel functions of the first and second kinds, *Proceedings of the Edinburgh Mathematical Society (Series 2)*, 53(3) (2010), 575-599. (IF: 0.697)
28. **Á. Baricz, S. Ponnusamy**, Starlikeness and convexity of generalized Bessel functions, *Integral Transforms and Special Functions*, 21(9) (2010), 641-653. (IF: 0.594)
29. **Á. Baricz, Y. Sun**, Bounds for the generalized Marcum Q-function, *Applied Mathematics and Computation*, 217(5) (2010), 2238-2250. (IF: 1.534)

30. **Y. Sun, Á. Baricz, S. Zhou**, Corrections to “Unified Laguerre polynomial-series-based distribution of small-scale fading envelopes”, *IEEE Transactions on Vehicular Technology*, 60(1) (2011), 347-349. (IF: 1.921)
31. **Á. Baricz, D. Jankov, T.K. Pogány**, Integral representation of first kind Kapteyn series, *Journal of Mathematical Physics*, 52(4) (2011), Art. 043518. (IF: 1.291)
32. **Á. Baricz, S. Ponnusamy, M. Vuorinen**, Functional inequalities for modified Bessel functions, *Expositiones Mathematicae*, 29(4) (2011), 399-414. (IF: 0.902)
33. **H. Alzer, Á. Baricz**, Functional inequalities for the incomplete gamma function, *Journal of Mathematical Analysis and Applications*, 385(1) (2012), 167-178. (IF: 1.050)
34. **Á. Baricz, D. Jankov, T.K. Pogány**, Integral representations for Neumann-type series of Bessel functions  $I_\nu$ ,  $Y_\nu$  and  $K_\nu$ , *Proceedings of the American Mathematical Society*, 140(3) (2012), 951-960. (IF: 0.609)
35. **Á. Baricz, D. Jankov, T.K. Pogány**, Turán type inequalities for Kratzel functions, *Journal of Mathematical Analysis and Applications*, 388(2) (2012), 716-724. (IF: 1.050)
36. **Á. Baricz, D. Jankov, T.K. Pogány**, Neumann series of Bessel functions, *Integral Transforms and Special Functions*, 23(7) (2012), 529-538. (IF: 0.730)
37. **Á. Baricz, S. Ponnusamy**, On Turán type inequalities for modified Bessel functions, *Proceedings of the American Mathematical Society*, 141(2) (2013), 523-532. (IF: 0.627)
38. **Á. Baricz, S. Ponnusamy**, Differential inequalities and Bessel functions, *Journal of Mathematical Analysis and Applications*, 400(2) (2013), 558-567. (IF: 1.119)
39. **Á. Baricz, M.E.H. Ismail**, Turán type inequalities for Tricomi confluent hypergeometric functions, *Constructive Approximation*, 37(2) (2013), 195-221. (IF: 1.169)
40. **Á. Baricz, K. Raghavendar, A. Swaminathan**, Turán type inequalities for q-hypergeometric functions, *Journal of Approximation Theory*, 168 (2013), 69-79. (IF: 0.896)
41. **Á. Baricz, D. Jankov, T.K. Pogány**, Integral representations of Dini series of Bessel functions, *Integral Transforms and Special Functions*, 24(8) (2013), 628-635. (IF: 0.814)
42. **Á. Baricz, T.K. Pogány**, Inequalities for the one dimensional analogous of the Coulomb potential, *Acta Polytechnica Hungarica*, 10(7) (2013), 53-67. (IF: 0.471)
43. **Á. Baricz, T.K. Pogány**, Integral representations and summations of the modified Struve function, *Acta Mathematica Hungarica*, 141(3) (2013), 254-281. (IF: 0.401)
44. **Á. Baricz, T.K. Pogány**, Turán determinants of Bessel functions, *Forum Mathematicum*, 26(1) (2014), 295-322. (IF: 0.962)
45. **Á. Baricz, T.K. Pogány**, Functional inequalities for the Bickley function, *Mathematical Inequalities and Applications*, 17(3) (2014), 989-1003. (IF: 0.645)
46. **Á. Baricz, P.A. Kupán, R. Szász**, The radius of starlikeness of normalized Bessel functions of the first kind, *Proceedings of the American Mathematical Society*, 142 (2014), 2019-2025. (IF: 0.681)
47. **Á. Baricz, B.A. Bhayo, T.K. Pogány**, Functional inequalities for generalized inverse trigonometric and hyperbolic functions, *Journal of Mathematical Analysis and Applications*, 417 (2014), 244-259. (IF: 1.120)
48. **Á. Baricz, T.K. Pogány**, On a sum of modified Bessel functions, *Mediterranean Journal of Mathematics*, 11(2) (2014), 349-360. (IF: 0.656)
49. **Á. Baricz**, Remarks on a parameter estimation for von Mises-Fisher distributions, *Computational Statistics*, 29 (2014), 891-894. (IF: 0.403)
50. **Á. Baricz**, Landen inequalities for special functions, *Proceedings of the American Mathematical Society*, 142 (9) (2014), 3059-3066. (IF: 0.681)
51. **Á. Baricz, R. Szász**, The radius of convexity of normalized Bessel functions of the first kind, *Analysis and Applications*, 12(5) (2014), 485-509. (IF: 0.796)

52. **Á. Baricz, T.K. Pogány**, Functional inequalities for modified Struve functions, *Proceedings of the Royal Society of Edinburgh: Section A Mathematics*, 144(5) (2014), 891-904. **(IF: 1.009)**
53. **Á. Baricz, T.K. Pogány**, Functional inequalities for modified Struve functions II, *Mathematical Inequalities and Applications*, 17(4) (2014), 1387-1398. **(IF: 0.645)**
54. **Á. Baricz, D. Jankov Masirevic, T.K. Pogány, R. Szász**, On an identity for zeros of Bessel functions, *Journal of Mathematical Analysis and Applications*, 422(1) (2015), 27-36. **(IF: 1.014)**
55. **Á. Baricz, A. Laforgia, T.K. Pogány**, Van der Corput inequalities for Bessel functions, *Integral Transforms and Special Functions*, 26(1) (2015), 78-87. **(IF: 0.528)**
56. **Á. Baricz, T.K. Pogány, S. Ponnusamy, I. Rudas**, Bounds for Jaeger integrals, *Journal of Mathematical Chemistry*, 53(5) (2015), 1257-1273. **(IF: 1.056)**
57. **Á. Baricz, B.A. Bhayo, M. Vuorinen**, Turán type inequalities for generalized inverse trigonometric functions, *Filomat*, 29(2) (2015), 303-313. **(IF: 0.603)**
58. **Á. Baricz**, Bounds for Turánians of modified Bessel functions, *Expositiones Mathematicae*, 33 (2) (2015), 223-251. **(IF: 0.784)**
59. **Á. Baricz**, Turán type inequalities for regular Coulomb wave functions, *Journal of Mathematical Analysis and Applications*, 430(1) (2015), 166-180. **(IF: 1.014)**
60. **Á. Baricz, E. Deniz, M. Caglar, H. Orhan**, Differential subordinations involving generalized Bessel functions, *Bulletin of the Malaysian Mathematical Sciences Society*, 38(3) (2015), 1255-1280. **(IF: 0.640)**
61. **Á. Baricz, B.A. Bhayo, R. Klén**, Convexity properties of generalized trigonometric and hyperbolic functions, *Aequationes Mathematicae*, 89(3) (2015), 473-484. **(IF: 1.000)**
62. **Á. Baricz, S. Ponnusamy, Cs. Varga**, Julia's lemma on the hyperbolic disk, *Annales Academiæ Scientiarum Fennicæ Mathematica*, 40 (2015), 939-948. **(IF: 0.830)**
63. **Á. Baricz, R. Szász**, The radius of convexity of normalized Bessel functions, *Analysis Mathematica*, 41(3) (2015), 141-151. **(IF: 0.225)**
64. **Á. Baricz, D.K. Dimitrov, I. Mező**, Radii of starlikeness and convexity of some q-Bessel functions, *Journal of Mathematical Analysis and Applications*, 435(1) (2016), 968-985. **(IF: 1.014)**
65. **Á. Baricz, S. Ponnusamy, S. Singh**, Turán type inequalities for general Bessel functions, *Mathematical Inequalities and Applications*, 19(2) (2016), 709-719. **(IF: 0.544)**
66. **Á. Baricz, R. Szász**, Close-to-convexity of some special functions and their derivatives, *Bulletin of the Malaysian Mathematical Sciences Society*, 39(1) (2016), 427-437. **(IF: 0.640)**
67. **Á. Baricz, M. Caglar, E. Deniz**, Starlikeness of Bessel functions and their derivatives, *Mathematical Inequalities and Applications*, 19(2) (2016), 439-449. **(IF: 0.544)**
68. **Á. Baricz, E. Deniz, N. Yagmur**, Close-to-convexity of normalized Dini functions, *Mathematische Nachrichten*, 14-15(289) (2016), 1721-1726. **(IF: 0.688)**
69. **Á. Baricz, S. Koumandos**, Turán type inequalities for some Lommel functions of the first kind, *Proceedings of the Edinburgh Mathematical Society*, 56 (2016), 569-579. **(IF: 0.730)**
70. **Á. Baricz, D. Jankov Masirevic, S. Ponnusamy, S. Singh**, Bounds for the product of modified Bessel functions, *Aequationes Mathematicae*, 90(4) (2016), 859-870. **(IF: 1.000)**
71. **H.A. Alkharsani, Á. Baricz, T.K. Pogány**, Starlikeness of a cross-product of Bessel functions, *Journal of Mathematical Inequalities*, 10(3) (2016), 819-827. **(IF: 0.636)**
72. **Á. Baricz, S. Ponnusamy, S. Singh**, Modified Dini functions: monotonicity patterns and functional inequalities, *Acta Mathematica Hungarica*, 149(1) (2016), 120-142. **(IF: 0.469)**
73. **Á. Baricz, S. Ponnusamy, S. Singh**, Turán type inequalities for confluent hypergeometric functions of the second kind, *Studia Scientiarum Mathematicarum Hungarica*, 53(1) (2016), 74-92. **(IF: 0.333)**
74. **Á. Baricz, D.K. Dimitrov, H. Orhan, N. Yagmur**, Radii of starlikeness of some special functions, *Proceedings of the American Mathematical Society*, 144(8) (2016), 3355-3367. **(IF: 0.700)**

75. **Á. Baricz, H. Orhan, R. Szász**, The radius of alpha convexity of normalized Bessel functions of the first kind, *Computational Methods and Function Theory*, 16(1) (2016), 93-103. (IF: 0.362)
76. **Sz. András, Á. Baricz, T.K. Pogány**, Ulam-Hyers stability of singular integral equations, via weakly Picard operators, *Fixed Point Theory*, 17(1) (2016), 21-36. (IF: 0.581)
77. **H.A. Alkharsani, Á. Baricz, K.S. Nisar**, Differential subordinations and superordinations for generalized Bessel functions, *Bulletin of the Korean Mathematical Society* 53(1) (2016) 127-138. (IF: 0.297)
78. **Á. Baricz, S.R. Mondal, A. Swaminathan**, Monotonicity properties of the Bessel-Struve kernel, *Bulletin of the Korean Mathematical Society* 53(6) (2016) 1845-1856. (IF: 0.297)
79. **Á. Baricz, S.Kant, J.K. Prajapat**, Differential subordination and superordination results associated with the Wright function, *Bulletin of the Iranian Mathematical Society* 42(6) (2016) 1459-1477. (IF: 0.283)
80. **Á. Baricz, S. Ponnusamy, S. Singh**, Turán type inequalities for Struve functions, *Journal of Mathematical Analysis and Applications*, 445(1) (2017), 971-984. (IF: 1.014)
81. **Á. Baricz**, Zeros of a cross-product of the Coulomb wave and Tricomi hypergeometric functions, *Proceedings of the American Mathematical Society* 145(4) (2017) 1643-1648. (IF: 0.700)
82. **Á. Baricz, N. Yagmur**, Geometric properties of some Lommel and Struve functions, *Ramanujan Journal* 42(2) (2017) 325-346. (IF: 0.563)
83. **I. Mező, Á. Baricz**, Bounds for the asymptotic order parameter of the stochastic Kuramoto model, *Journal of Approximation Theory*, 217 (2017), 1-14. (IF: 0.921)

## 10.2. Articole publicate în reviste indexate BDI

[Mathematical Reviews, Zentralblatt Math, STMA-Z Statistical Theory]

1. **Á. Baricz**, Applications of the admissible functions method for some differential equations, *Pure Mathematics and Applications*, 13(4) (2002), 433-440.
2. **Á. Baricz**, A subclass of starlike functions, *Mathematica*, 47(70)(1) (2005), 19-25.
3. **Á. Baricz**, Univalent functions in simply connected domains, *Libertas Mathematica*, (25) (2005), 97-103.
4. **Á. Baricz**, Landen-type inequality for Bessel functions, *Computational Methods and Function Theory*, 5(2) (2005), 373-379.
5. **Á. Baricz, E. Neuman**, Inequalities involving generalized Bessel functions, *Journal of Inequalities in Pure and Applied Mathematics*, 6(4) (2005), Art. 126.
6. **Á. Baricz**, Geometric properties of generalized Bessel functions of complex order, *Mathematica*, 48(71)(1) (2006), 13-18.
7. **Á. Baricz**, Bessel transforms and Hardy space of generalized Bessel functions, *Mathematica*, 48(71)(2) (2006), 127-136.
8. **Á. Baricz**, Grünbaum-type inequalities for special functions, *Journal of Inequalities in Pure and Applied Mathematics*, 7(5) (2006), Art. 175.
9. **Á. Baricz**, Redheffer type inequality for Bessel functions, *Journal of Inequalities in Pure and Applied Mathematics*, 8(1) (2007), Art. 11.
10. **Á. Baricz**, Convexity of the zero-balanced Gaussian hypergeometric functions with respect to Hölder means, *Journal of Inequalities in Pure and Applied Mathematics*, 8(2) (2007), Art. 40.
11. **Á. Baricz**, Functional inequalities for Galué's generalized modified Bessel functions, *Journal of Mathematical Inequalities*, 1(2) (2007), 183-193.
12. **Á. Baricz**, A functional inequality for the survival function of the gamma distribution, *Journal of Inequalities in Pure and Applied Mathematics*, 9(1) (2008), Art. 13.
13. **Á. Baricz**, Jordan-type inequalities for generalized Bessel functions, *Journal of Inequalities in Pure and Applied Mathematics*, 9(2) (2008), Art. 39.

14. **Á. Baricz, J. Sándor**, Extensions of the generalized Wilker inequality to Bessel functions, *Journal of Mathematical Inequalities*, 2(3) (2008), 397-406.
15. **S. András, Á. Baricz**, Monotonicity property of generalized and normalized Bessel functions of complex order, *Complex Variables and Elliptic Equations*, 54(7) (2009), 689-696.
16. **S. András, Á. Baricz, Y. Sun**, The generalized Marcum Q-function: an orthogonal polynomial approach, *Acta Universitatis Sapientiae Mathematica*, 3(1) (2011), 60-76.
17. **Á. Baricz, J. Vesti, M. Vuorinen**, On Kaluza's sign criterion for reciprocal power series, *Annales Universitatis Mariae Curie-Skłodowska. Sectio A. Mathematica*, 65(2) (2011), 1-16.
18. **Á. Baricz**, Mills' ratio: reciprocal convexity and functional inequalities, *Acta Universitatis Sapientiae Mathematica*, 4(1) (2012), 26-35.

### 10.3. Cărți publicate în edituri internaționale recunoscute

1. **Á. Baricz**, *Generalized Bessel functions of the first kind*, Lecture Notes in Mathematics, Springer, Berlin, 2010.

### 10.4. Cărți publicate în edituri recunoscute CNCSIS

2. **András Sz., Baricz Á.**, *Statisztika közgazdászoknak (Statistică pentru economiști)*, Ed. Státus, Miercurea-Ciuc, 2007.

## 11. Burse câștigate prin competiție

- [2002 iulie] Școala de vară la Universitatea Eötvös Lóránd, Budapesta, Ungaria.
- [2003 februarie-martie] Bursă universitară la Universitatea Eötvös Lóránd, Budapesta, Ungaria.
- [2004 iulie] Școala de vară Floer Homology, Gauge Theory and Low Dimensional Topology la Institutul de Matematică Alfréd Rényi, Budapesta, Ungaria.
- [2009-2012] Bursa de cercetare Bolyai János a Academiei Maghiare de Științe.
- [2013-2016] Bursa de cercetare Bolyai János a Academiei Maghiare de Științe.

## 12. Premii

- [2002] premiul I la Conferința Științifică din Transilvania pentru Studenți; profil: matematică; titlul lucrării: *Some particular cases of the differential subordinations and superordinations*.
- [2003] premiul II la Conferința Științifică din Transilvania pentru Studenți; profil: matematică; titlul lucrării: *Some immediately applications of the admissible functions method*.
- [2010] Premiul Cercetării Științifice, Universitatea Babeș-Bolyai.
- [2012] Premiul pentru Tinerii Cercetători, Filiala din Cluj a Academiei Maghiare de Științe.
- [2014] Premiul Cercetării Științifice, Universitatea Babeș-Bolyai.

## 13. Lucrări prezentate la seminariile de cercetare și conferințe internaționale

- [24.02.2005] *Generalized and normalized Bessel functions*, Universitatea din Debrecen, Ungaria.
- [08.02.2007] *Inequalities concerning elliptic integrals and Bessel functions*, Universitatea din Debrecen, Ungaria.
- [12.04.2007] *Turán type inequalities for Bessel functions and hypergeometric functions*, Institutul de Matematică Rényi Alfréd al Academiei de Științe Ungare, Ungaria
- [21.05.2007] *Inequalities for Bessel functions*, Universitatea din Helsinki, Finlanda

- [10.04.2008] *Turán type inequalities and the generalized Marcum  $Q$  function*, Universitatea din Debrecen, Ungaria
- [26.02. 2009] *Generalizations of Minkowski's inequality and geometrically concave univariate distributions*, Universitatea din Debrecen, Ungaria
- [21.08.2009] *Starlikeness and convexity of generalized Bessel functions*, Universitatea din Turku, Finlanda
- [15.04.2010] *Turán type inequalities for Bessel and modified Bessel functions*, Institutul Indian de Tehnologie Madras, India
- [18.11.2010] *Turán type inequalities for Bessel functions*, Societatea Matematicienilor si Fizicienilor din Rijeka, Croația
- [30.05.2011] *Turán type inequalities for some special functions*, Universitatea City din Hong Kong, Hong Kong
- [10.10.2011] *Turán type inequalities for Tricomi confluent hypergeometric functions*, Universitatea din Helsinki, Finlanda
- [14.10.2011] *An orthogonal polynomial approach to generalized Marcum  $Q$ -function*, Universitatea din Turku, Finlanda
- [04.09.2012] *Bounds for Turánians of modified Bessel functions*, Universitatea din Patras, Grecia
- [13.03.2013] *Turán type inequalities for modified Bessel functions of the first and second kind*, Universitatea Óbuda, Budapesta, Ungaria
- [11.06.2013] *The radii of starlikeness and convexity of normalized Bessel functions*, Universitatea din Shantou, China
- [29.08.2013] *Turán type inequalities, Stieltjes transforms and infinite divisibility*, Universitatea din Copenhaga, Copenhaga, Danemarca
- [09.10.2013] *The radius of convexity of three kind of normalized Bessel functions of the first kind*, Universitatea din Cipru, Nicosia, Cipru
- [06.11.2013] *The monotone form of l'Hospital's rule and geometrically concave distributions*, Institutul Indian de Statistică, Chennai, India
- [07.11.2013] *Infinitely divisible distributions, Stieltjes transforms and Turán type inequalities*, Institutul Indian de Statistică, Chennai, India
- [18.03.2014] *The new-is-better-than-used class of life distributions*, Institutul Indian de Statistică, Chennai, India
- [20.03.2014] *Turán type inequalities inequalities for some functions arising in probability theory*, Institutul Indian de Statistică, Chennai, India
- [23.05.2014] *Inequalities for the generalized inverse trigonometric and hyperbolic functions*, Congres Matematic din Serbia, Vrnjacka Banja, Serbia
- [04.06.2014] *Infinitely divisible distributions, Stieltjes transforms and Turán type inequalities*, Universitatea Kafkas, Kars, Turcia
- [05.06.2014] *Radii of starlikeness and convexity of three kind of normalized Bessel functions of the first kind*, Universitatea Kafkas, Kars, Turcia
- [06.06.2014] *Geometrically concave univariate distributions*, Universitatea Kafkas, Kars, Turcia
- [24.06.2014] *Turán type inequalities for Struve and modified Struve functions*, Academia Croată, Trogir, Croația
- [28.02.2015] *Turán type inequalities connected to infinitely divisible distributions*, Universitatea Bharathidasan, Tiruchirappalli, India
- [05.03.2015] *Starlikeness of normalized Bessel functions and their derivatives*, Institutul Indian de Statistică, Chennai, India

- [28.05.2015] *Radii of starlikeness and convexity of some  $q$ -Bessel functions*, Universitatea din Erzincan, Erzincan, Turcia

#### 14. Activități editoriale și alte activități profesionale

- Recenzor la *Mathematical Reviews* [2006-prezent] [139 recenzii publicate].
- Recenzor la *Zentralblatt für Mathematik* [2012-prezent] [7 recenzii publicate].
- Membru al grupului *Research Group in Mathematical Inequalities and Applications* [2006-prezent].
- Membru al societății *American Mathematical Society [AMS]* [2008-prezent].
- Membru al corporației doctorilor a *Academiei Maghiare de Științe* [2009-prezent].
- Editor la revista *Journal of Classical Analysis* [2011-prezent].
- Editor invitat la revista *Abstract and Applied Analysis* pentru volumul *Trends in Classical Analysis, Geometric Function Theory, and Geometry of Conformal Invariants* [2012].
- Membru în comisia de doctorat pentru teza *Integral expressions for series of functions of hypergeometric and Bessel types* susținută de *Dragana Jankov* pe data de 22.11.2011 la *Universitatea din Zagreb, Zagreb, Croația*.
- Referent la următoarele reviste și conferințe internaționale de specialitate [perioada: 2007-prezent] *Abstract and Applied Analysis, Acta Mathematica Scientia, Acta Polytechnica Hungarica, Advances in Computational Mathematics, Aequationes Mathematicae, Afrika Matematika, Analysis and Applications, Applications and Applied Mathematics, Applied Mathematical Modelling, Applied Mathematics Letters, Arab Journal of Mathematical Sciences, Arabian Journal for Science and Engineering, Bulletin of the Belgian Mathematical Society – Simon Stevin, Bulletin of the Korean Mathematical Society, Bulletin of the Malaysian Mathematical Sciences Society, Computer Physics Communications, Comptes Rendus Mathematique, Computational Methods and Function Theory, Computers and Mathematics with Applications, Constructive Approximation, Demonstratio Mathematica, Georgian Mathematical Journal, Hacettepe Journal of Mathematics and Statistics, IEEE Communications Letters, IEEE Globecom 2009 Optical Networks and Systems Symposium (GC' 09 ONS), IEEE Signal Processing Letters, IEEE Transactions on Communications, IEEE Transactions on Information Forensics and Security, IEEE Transactions on Information Theory, IEEE Transactions on Vehicular Technology, IEEE Wireless Communications Letters, IEEE Wireless Communications and Networking Conference (WCNC 2009), Indagationes Mathematicae, Integral Transforms and Special Functions, International Journal of Analysis, International Journal of Mathematics and Mathematical Sciences, International Symposium on Symbolic and Algebraic Computation (ISSAC 2014), Journal of Analysis, Journal of Applied Mathematics, Journal of Approximation Theory, Journal of Classical Analysis, Journal of Computational and Applied Mathematics, Journal of Fourier Analysis and Applications, Journal of Inequalities and Applications, Journal of Inequalities in Pure and Applied Mathematics, Journal of Mathematical Analysis and Applications, Journal of Mathematical Inequalities, Journal of Mathematical Physics, Journal of Scientific Research and Reports, LMS Journal of Computation and Mathematics, Mathematica [Cluj], Mathematical and Computer Modelling, Mathematical Communications, Mathematical Inequalities and Applications, Mathematica Scandinavica, Mathematica Slovaca, Matematicki Vesnik, Mathematische Nachrichten, Note di Matematica, Novi Sad Journal of Mathematics, Periodica Mathematica Hungarica, Proceedings of the American Mathematical Society, Proceedings of the London Mathematical Society, Publicationes Mathematicae Debrecen, Quarterly of Applied Mathematics, Revista de la Real Academia de Ciencias Exactas, Fisicas Y Naturales Serie A Matematicas, Rocky Mountain Journal of Mathematics, Studia Scientiarum Mathematicarum Hungarica, Studia Universitatis Babes-Bolyai Mathematica, Symmetry, Integrability and Geometry: Methods and Applications, Tamkang Journal of Mathematics, The Ramanujan Journal, Vietnam Journal of Mathematics*



**15. Limbi cunoscute:** maghiară [limbă maternă], română [citat/scris/vorbit foarte bine], engleză [citat/scris/vorbit bine].

**16. Numărul Erdős:** 3 [Á. Baricz - J. Sándor - F. Luca - P. Erdős].

**17. Numărul de citări independente:** 475 [*h*-index: 12].

**18. Domenii de interes**

- Funcții speciale: funcții Bessel și modificate Bessel, funcții hipergeometrice Gauss, funcția gamma, funcția zeta, polinoame ortogonale, integrale eliptice Legendre, funcția Marcum generalizată
- Inegalități analitice, inegalități în economii, forma monotonă a regulii l'Hospital
- Teoria probabilității: distribuția hi și hi pătrat necentrat, distribuții log-concave și aplicații
- Teoria geometrică a funcțiilor univalente: univalență, stelaritate, convexitate, subordonări

**19. Participări la programe finanțate din sursă națională**

- Grant GTC\_31777 (2016-2017) de cercetare al Universității Babeș-Bolyai, Titlu: *Raza de stelaritate a unor funcții speciale*, director proiect: Árpád Baricz.
- Grant GSCE\_30246 (2015) de cercetare al Universității Babeș-Bolyai, Titlu: *Zerourile derivatelor funcțiilor Bessel*, director proiect: Árpád Baricz.
- Grant GTC\_34021 (2013-2014) de cercetare al Universității Babeș-Bolyai, Titlu: *Studiul funcțiilor trigonometrice inverse generalizate*, director proiect: Árpád Baricz.
- Grant CNCS de cercetare PN-II-RU-TE\_0190/2012 (2013-2015), Titlu: *Studiul funcțiilor speciale cu metode din analiza reală și complexă*, director proiect: Árpád Baricz.
- Grant CNCSIS de cercetare postdoctorală PN-II-RU-PD\_388/2010 (2010-2012), Titlu: *Funcții speciale: inegalități și aplicații*, director proiect: Árpád Baricz.
- Grant CNCSIS 348/2005 (2005, 2006), Titlu: *Metode geometrice în teoria funcțiilor reale și complexe. Aplicații*, director proiect: Grigore Șt. Sălăgean.
- Grant CEEEX, nr. 130/2006 (2006, 2007), Titlu: *Dezvoltarea unor parteneriate de cercetare în vederea integrării europene a cercetării matematice de vârf românești în domeniile analizei neliniare, topologiei diferențiale și ale aplicațiilor acestora*, director proiect: Varga Csaba.
- Grant CNCSIS de tip A, nr. 1472/2007 (2007, 2008), Titlu: *Probleme moderne în teoria geometrică a funcțiilor de o variabilă și de mai multe variabile. Aplicații*, director proiect: Gabriela Kohr.

Data: 20 martie 2017

Semnătura

**Conf. univ. dr. Baricz Árpád**