FUNCTIONAL STOLARSKY MEANS

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Abstract. A functional generalization is given for Stolarsky mean and its basic properties investigated. Functional means in n variables are also considered.

REFERENCES

[1] P. S. BULLEN, D. S. MITRINOVIĆ AND P. M. VASIĆ, *Means and their inequalities*, Reidel, Dordrecht, 1988.
[2] S.–Y. CHUNG, *Functional means and harmonic functional means*, Bull. Austral. Math. Soc. **57** (1998), 207–220.
[3] A. M. FINK, *Two inequalities*, Univ. Beograd Publ. Elektrotehn. Fak. Ser. Mat. **6** (1995), 48–49.
[4] A. M. FINK, *Hadamard inequalities for logarithmic concave functions*, Math. Comput. Modeling (to appear).
[5] P. M. GILL, C. E. M. PEARCE AND J. PEČARIĆ, *Hadamard's inequality for r−convex functions*, J. Math Anal. Appl. **215** (1997), 461–470.
[6] G. H. HARDY, J. E. LITTLEWOOD AND G. PÓLYA, *Inequalities, 2nd ed.*, Cambridge Univ. Press, Cambridge, 1959.
[7] E. LEACH AND M. SHOLANDER, *Extended mean values II*, J. Math. Anal. Appl. **92** (1983), 207–223.
[8] B. MOND AND J. PEČARIĆ, *A companion to Fink's inequality*, Octogon Math. Magazine (Brasor) **5** (1997), 3–8.
[9] E. NEUMAN, *The weighted logarithmic mean*, J. Math. Anal. Appl. **188** (1994), 885–900.
[10] ZS. PÁLES, *Inequalities for differences of powers*, J. Math. Anal. Applic. **131** (1988), 271–281.
[11] ZS. PÁLES, *Comparison of two variable homogeneous means*, General Inequalities (Oberwolfach 1990), Ed. E. Walter, Birkhäuser Verlag, Basel, **6** (1992), 59–70.
[12] C. E. M. PEARCE AND J. PEČARIĆ, *A continuous analogue and an extension of Radó's formulæ*, Bull. Austral. Math. Soc. **53** (1996), 229–233.
[13] C. E. M. PEARCE, J. PEČARIĆ AND V. ŠIMIĆ, *Stolarsky means and Hadamard's Inequality*, J. Math. Anal. Appl. **220** (1998), 99–109.
[14] J. PEČARIĆ AND V. ČULJAK, *On Hadamard inequalities for logarithmic convex functions*, submitted.
[15] J. PEČARIĆ AND V. ŠIMIĆ, *The Stolarsky-Tobey mean in n variables*, Math.Inequal.Appl. **2** (1999), 325–341.
[16] A. O. PITTENGER, *The logarithmic mean in n variables*, Amer. Math. Monthly **92** (1987), 282–291.
[17] F. SAIDI AND R. YOUNIS, *Hadamard and Fejer–type Inequalities*, to appear in Archiv der Mathematik.
[18] K. B. STOLARSKY, *Generalizations of the logarithmic mean*, Math. Mag. **48** (1975), 87–92.
[19] M. D. TOBEY, *A two–parameter homogeneous mean value*, Proc. Amer. Math. Soc. **18** (1967), 9–14.

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