

QUANTUM INTEGRAL INEQUALITIES FOR CONVEX FUNCTIONS

WEERAWAT SUDSUTAD, SOTIRIS K. NTOUYAS AND JESSADA TARIBOON

Abstract. In this paper we establish some new quantum integral inequalities for convex functions.

Mathematics subject classification (2010): 34A08, 26D10, 26D15.

Keywords and phrases: Hermite-Hadamard inequality, convex functions, integral inequalities.

REFERENCES

- [1] J. HADAMARD, *Etude sur les propriétés des fonctions entières et en particulier d'une fonction considérée par Riemann*, J. Math. Pures Appl. **58** (1893) 171–215.
- [2] V. KAC, P. CHEUNG, *Quantum Calculus*, Springer, New York, 2002.
- [3] J. TARIBOON, S. K. NTOUYAS, *Quantum calculus on finite intervals and applications to impulsive difference equations*, Adv. Differ. Equ. 2013, **2013**:282.
- [4] J. TARIBOON, S. K. NTOUYAS, *Quantum integral inequalities on finite intervals*, J. Inequal. Appl. 2014, **2014**:121.
- [5] S. S. DRAGOMIR AND R. P. AGAWAL, *Two inequalities for differentiable mappings and applications to special means of real numbers and to trapezoidal formula*, Appl. Math. Lett. **11** (5) (1988) 91–95.
- [6] C. E. M. PEARCE AND J. PEĆCARIĆ, *Inequalities for differentiable mappings with application to special means and quadrature formula*, Appl. Math. Lett. **13** (2000) 51–55.
- [7] B. G. PACHPATTE, *Analytic inequalities: Recent Advances*, Atlantic Press, Amsterdam-Paris, 2012.