

## 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.