1145-39-2605 Feifei Du and Wei Hu^{*}, wei.hu@huskers.unl.edu, and Lynn Erbe and Allan Peterson. Some new integral inequalities on time scales.

Feng Qi proposed the following open problem: under what conditions does the inequality

$$\int_{a}^{b} [f(x)]^{t} dx \ge \left[\int_{a}^{b} f(x) dx\right]^{t-1}$$

hold for t > 1? The inequality has been studied by various authors in the cases of q-integral inequalities, (q, h) integral inequalities on discrete time scales and time scales. In this paper, we give some generalizations of Feng-Qi type inequalities on time scales, which includes new results. (Received September 25, 2018)