1077-01-1508

Jiri Hudecek\* (jh602@cam.ac.uk), Needham Research Institute, 8 Sylvester Road, Cambridge, CB39AF, England. How to Assess Influence: Wu Wen-Tsun's Work in Measure, Number and Weight.

Wu Wen-Tsun is a contemporary Chinese mathematician famous for his work in algebraic topology and in computer proofs and mechanisation of mathematics. He received the Chinese Highest National Prize for Science and Technology in 2001 for this work, but also for his "fervent patriotism", which motivated his return to China from France in the 1950s, and his promotion of ancient Chinese mathematics, which, he has claimed, inspired the Wu method of mechanisation of proofs. All literature about him published in China is written in a celebratory style, and so I tried in my PhD dissertation to construct an alternative appraisal of his influence through a combination of quantitative and qualitative assessments. The results are somewhat unexpected, and raise several methodological questions, which can be of wider significance for historians of modern mathematics: how to use citation counts to compare older and newer papers, and papers from different branches of mathematics? Can the significance of a particular result be established from its published reviews, and from its place in standard textbooks? How to combine these two approaches? I will present some concrete answers related to Wu Wen-Tsun's work, as well as more general reflections on these problems. (Received September 20, 2011)