1125-11-527   **Thotsaporn Aek Thanatipanonda** and **Doron Zeilberger*** (`doronzeil@gmail.com`), 110 Frelinghuysen Rd, Department of Mathematics, Hill Center, Busch Campus, Piscataway, NJ 08854. *Debunking Richard Guy's Law of Small Numbers.*

Richard K. Guy (born, Sept. 30, 1916), who has recently celebrated his 100-th birthday, famously formulated the "Strong Law of Small Numbers" and gave lots of "cautionary tales" of pairs of sequences that agree for quite a few terms, only to disagree later on. This examples are often used by by purists to uphold the current (misguided!) dogma in mathematics, that empirical proofs, based on checking many special cases, are not to be trusted, and that only fully rigorous proofs are safe.

We will argue that in many cases empirical proofs are very trustworthy, and will explain why some "cautionary tales" (including so-called Pisot sequences) should not intimidate us empiricists. (Received September 05, 2016)