

1163-01-1541 **Toke L Knudsen*** (toke.knudsen@oneonta.edu). *Hans Christian Andersen and the Pythagorean Theorem.*

Most people will know at least some of the fairy tales of Hans Christian Andersen (1805–75). They have been translated to some 160 languages and include *The Princess and the Pea*, *The Ugly Duckling*, and *The Emperor's New Clothes*. But it is not at all well known that Andersen in 1831 wrote a poem on mathematics. The poem, entitled *Formens evige magie* (*The Eternal Magic of Form*), presents the Pythagorean theorem along with a proof, based on that found in Euclid's *Elements*. While the poem has been largely isolated from the world of mathematics and the history of mathematics, it is nonetheless a fascinating piece of literature, which tells us a lot about Andersen's mathematical education and attitude to mathematics. The talk will present an English translation of the poem along with a discussion of its context, including Andersen's own recollections of his interactions with mathematics when he was in school. (Received September 15, 2020)