1154-R1-46 **Susan D'Agostino***, sdagost2@jhu.edu. *Free Your Inner Mathematician Through Stories*. The best math stories, like the best math teaching, artfully balance technical details with engaging narratives to make the math accessible and compelling. Mathematician writers accomplish this by offering an enticing lead, introducing memorable characters, ensuring dramatic tension, including inviting sketches, and delivering practical and personal lessons. In this talk, participants will hear some of the 46 stories—complete with pictures—included in the speaker's forthcoming book, How to Free Your Inner Mathematician: Notes on Mathematics and Life (Oxford University Press, March 2020). These tales weave math content with lessons for mathematical success. Come prepared to hear about Archimedes' pursuits, the Pigeonhole Principle, Fermat's Last Theorem, Penrose patterns, game theory, bacteriophages with icosahedral symmetry, and more. Leave with lessons that encourage you and all aspiring mathematicians to embrace change, proceed at one's own pace, resist comparison, have faith, fail more often, look for beauty, exercise imagination, define success for oneself, and more. Both this talk and the book on which it is based not only deliver engaging mathematical content but provide reassurance that mathematical success has more to do with curiosity and drive than innate aptitude. (Received July 19, 2019)