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Takumi Murayama* (takumim@umich.edu), Department of Mathematics, University of Michigan, 530 Church St, Ann Arbor, MI 48109-1043. *Seshadri constants and singularities.*

Frobenius–Seshadri constants are positive characteristic analogues of Seshadri constants, which were introduced by Mustațǎ–Schwede and the presenter as a way to measure local positivity of line bundles in positive characteristic. We describe how Frobenius–Seshadri constants can be used to study Seshadri constants on singular varieties, giving new results even over the complex numbers. In particular, we will explain the interaction between Seshadri constants and log canonical thresholds, and how Frobenius–Seshadri constants can be used to prove a weak version of Fujita’s conjecture that asserts generic global generation for big and nef Cartier divisors in characteristic zero or ample and free Cartier divisors in positive characteristic. (Received September 02, 2018)