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Sean W Perry* (sperry9@fau.edu), 8612 SW 17th Ave, Stuart, FL 34997. *An upper bound on the number of solutions in a particular gravitational lensing ensemble.*

Due to the phenomenon of gravitational lensing, a single point-source of light may be observed as several images when a distribution of mass exists between the observer and the source. We prove an upper bound on the number of lensed images in the case where the mass doing the lensing consists of finitely many point masses. In this setting, the problem reduces to studying the zeros of a complex rational function of a single complex variable and its conjugate. (Received September 09, 2019)