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# New expressions for the Laplace Limit Constant

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**Abstract.** The solution of Kepler's famous equation can be expressed as an infinite sum for which the radius of convergence, $\lambda$, is called the Laplace Limit Constant. So far, no explicit expression has been discovered for this constant. In this note, we point out that $\lambda$ can be expressed in closed form, in terms of the $r$-Lambert special function. Based upon this observation, we give a new infinite series representation for $\lambda$ in terms of the Laguerre polynomials.

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