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# What is a Hermite-Padé approximation problem?

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## Abstract

The goal of this talk is introduce you to the theory of Hermite-Padé approximants. Hermite-Padé approximants, which are a natural extension of Padé approximants, were first used by Hermite in his proof of the transcendence of  $e$ .

We will see how this theory is related to other areas as orthogonal polynomials and Riemann-Hilbert problems, and we will present some recent results about uniform convergence of these Hermite-Padé approximants.

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