
Asymptotics and Riemann-Hilbert Problems

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Summary. A powerful method has recently been introduced in asymptotic analysis, which is based on Riemann-Hilbert Problems in higher dimensions. This method can be used to find not only asymptotic solutions to nonlinear differential equations, but also to find the behaviour of orthogonal polynomials as the degree goes to infinity. In this task, I will present a short introduction to this powerful method.

