

Chapter 2

Runge Phenomena

The Runge phenomenon refers to the large oscillations that can occur when using polynomial interpolation at equidistant points.

2.1 Controlling error by controlling location of nodes

By strategically choosing the locations of interpolation nodes, one can minimize the error in polynomial interpolation.

2.2 Chebyshev Nodes

Chebyshev nodes are specific points used in polynomial interpolation to minimize the interpolation error, particularly to avoid the Runge phenomenon.