

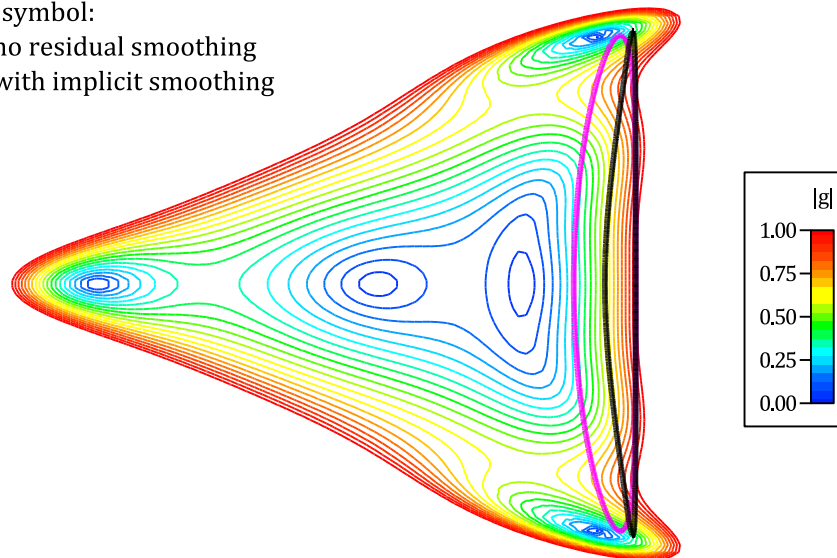
Explicit (5,3)-scheme, convection equation

Base scheme: central spatial discretization, $\sigma = 3.6$, $\varepsilon^{(4)} = 1/64$.

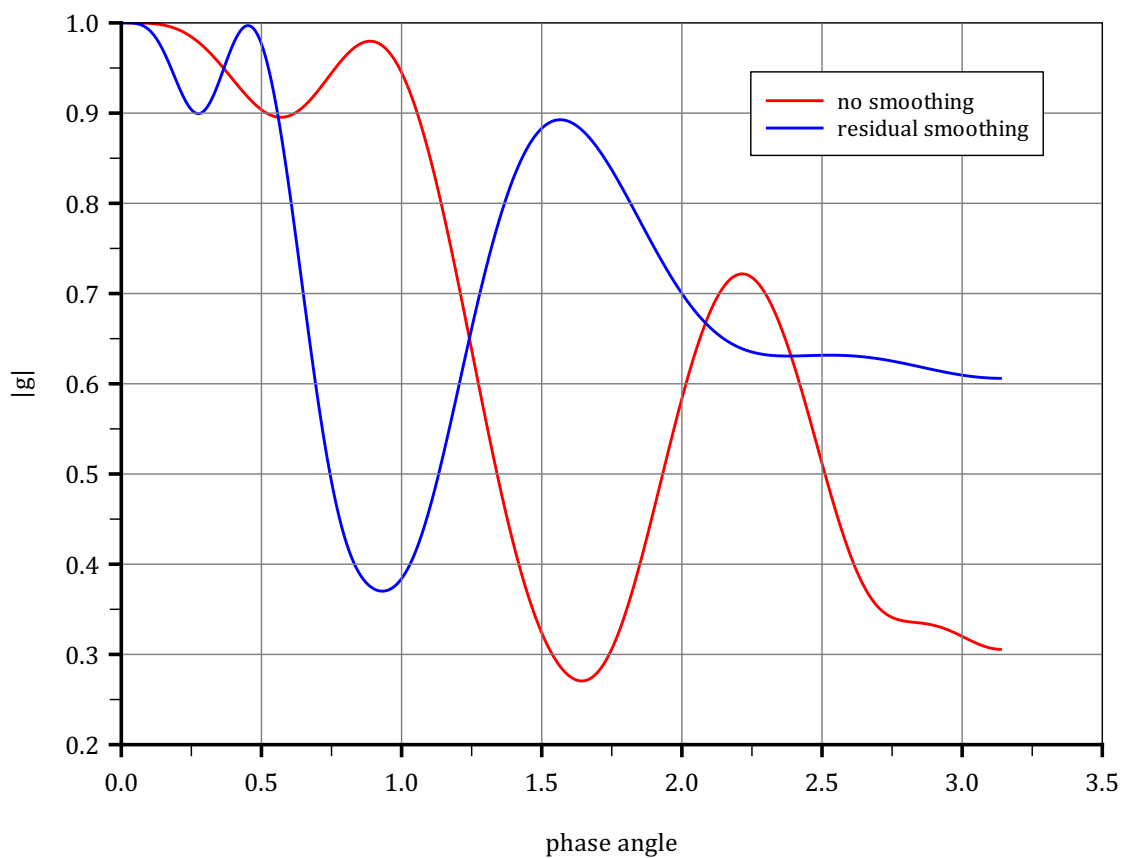
Scheme with central residual smoothing: $\sigma = 7.5$, $\varepsilon = 0.8$.

Fourier symbol:

— no residual smoothing
— with implicit smoothing



Fourier symbol z of the spatial operator and contours of the magnitude of the amplification factor $|g|$.



Magnitude of the amplification factor $|g|$ over the phase angle φ .