

FIG. 3. Exact solution (solid curve) and asymptotic expansion (dashed curve) of the real part (upper plot) and imaginary part (lower plot) of the Hankel function starting at  $\lambda = 2$ .

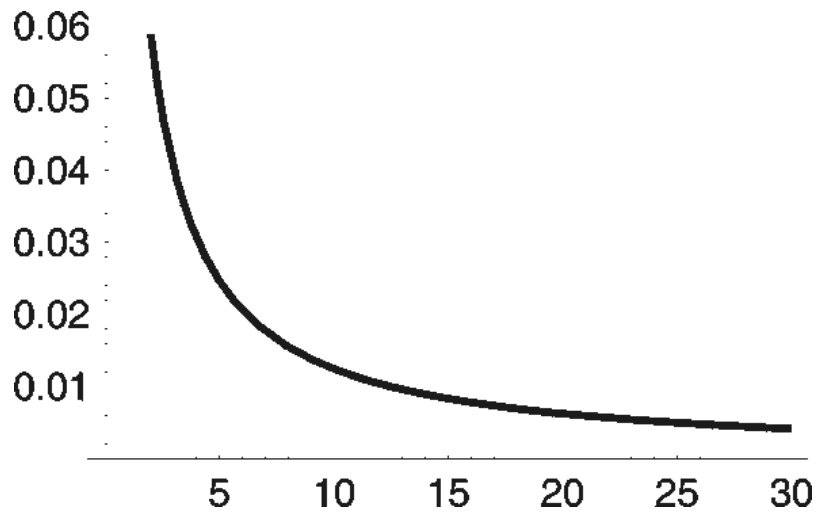


FIG. 4. Percentage error in the one term asymptotic expansion of the Hankel function.