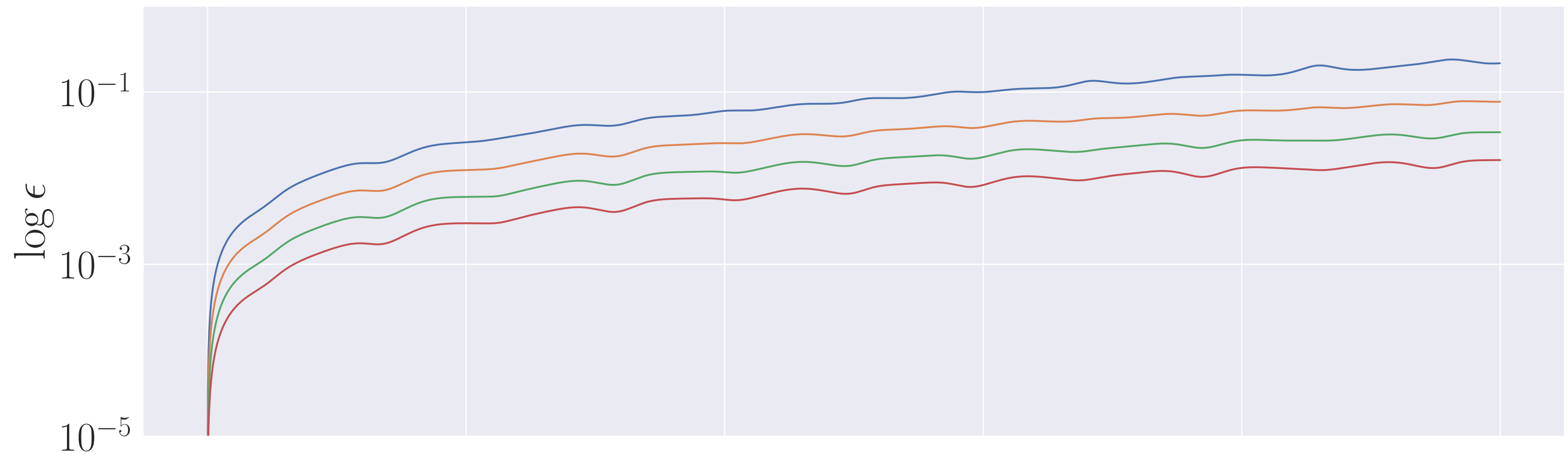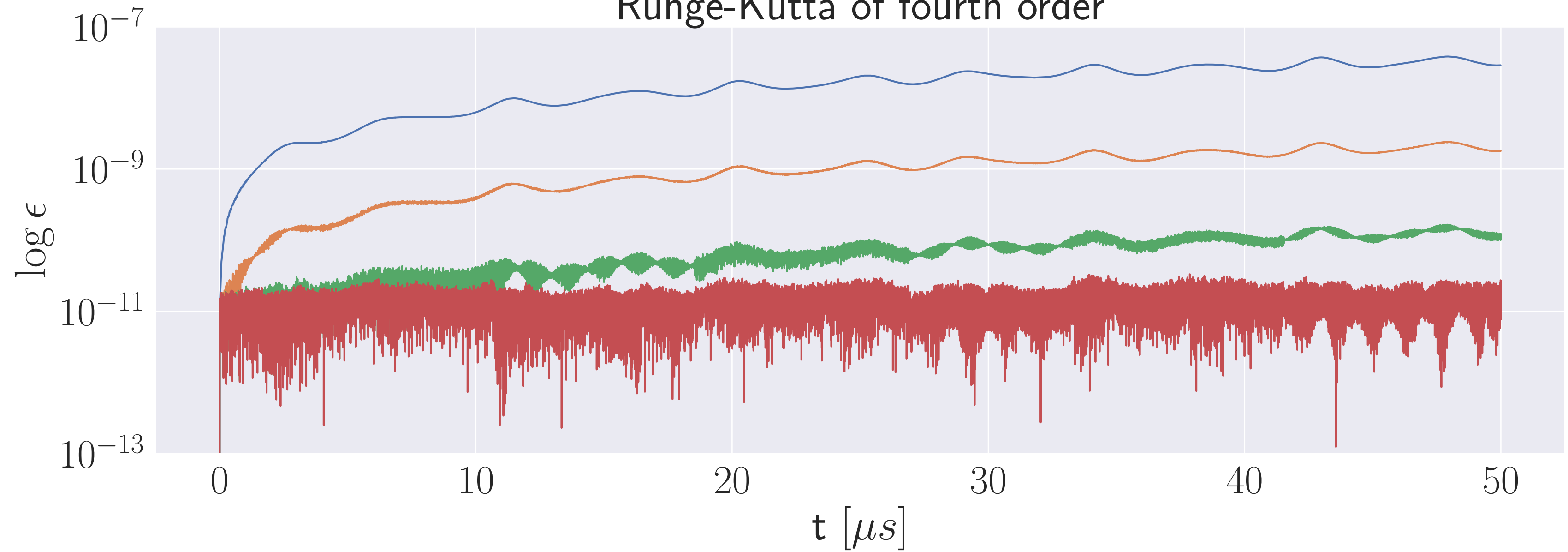Comparison of relative error for different step sizes

Forward Euler

Runge-Kutta of fourth order

$N = 2^2 \cdot 1000$　　$N = 2^3 \cdot 1000$　　$N = 2^4 \cdot 1000$　　$N = 2^5 \cdot 1000$