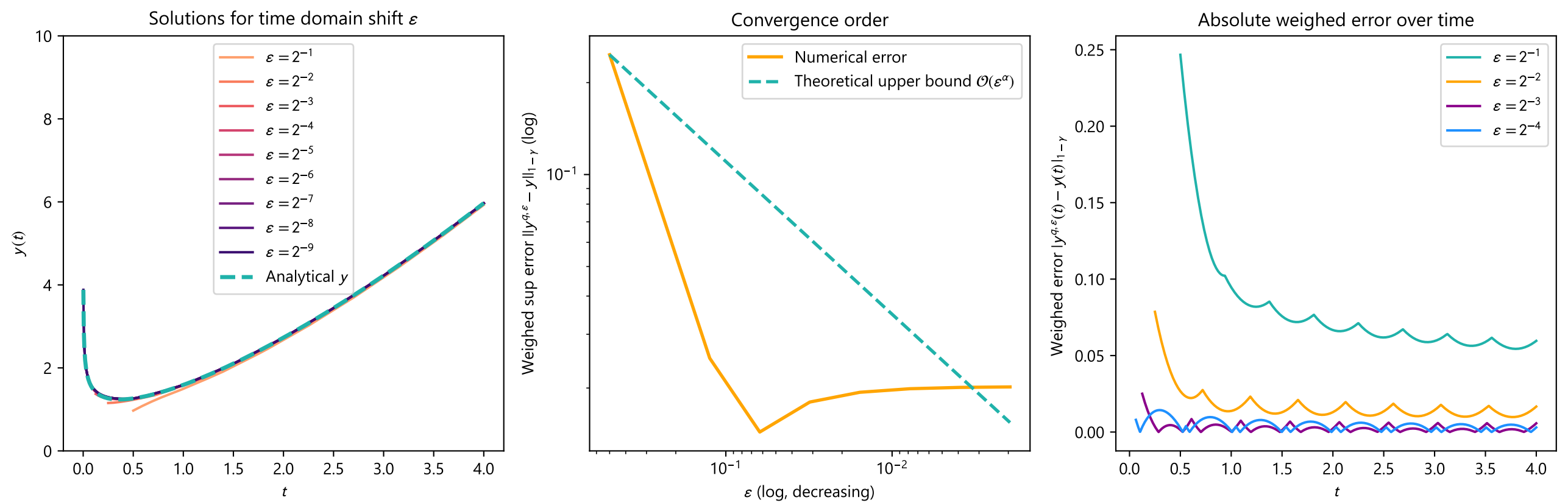
Solutions for time domain shift ε
$\varepsilon = 2^{-1}$
$\varepsilon = 2^{-2}$
$\varepsilon = 2^{-3}$
$\varepsilon = 2^{-4}$
$\varepsilon = 2^{-5}$
$\varepsilon = 2^{-6}$
$\varepsilon = 2^{-7}$
$\varepsilon = 2^{-8}$
$\varepsilon = 2^{-9}$
Analytical y
$y(t)$
t
Convergence order
Numerical error
Theoretical upper bound $\mathcal{O}(\varepsilon^{\alpha})$
Weighed sup error $\|y^{q,\varepsilon} - y\|_{1-\gamma}$ (log)
ε (log, decreasing)
Absolute weighed error over time
$\varepsilon = 2^{-1}$
$\varepsilon = 2^{-2}$
$\varepsilon = 2^{-3}$
$\varepsilon = 2^{-4}$
Weighed error $|y^{q,\varepsilon}(t) - y(t)|_{1-\gamma}$
t