Numerial solution of the system of equations of x(t)
(with error bounds, N=2, x0=0.5)

x(t) or y(t) — Time t

Legend:
- error(x), $a = 1.0$, $N = 2$, $x_0 = 0.5$, $\alpha = 1.0$
- error(x), $a = 1.0$, $N = 2$, $x_0 = 0.5$, $\alpha = 2.0$
- error(x), $a = 1.0$, $N = 2$, $x_0 = 0.5$, $\alpha = \dfrac{\sqrt{N}}{x_0} = 2\sqrt{2}\,(minimum)$