iterates

x_{n+1}
x_{n+2}
x_{n+3}
x_{n+4}
x_{n+5}
x_{n+6}
x_{n+7}

...

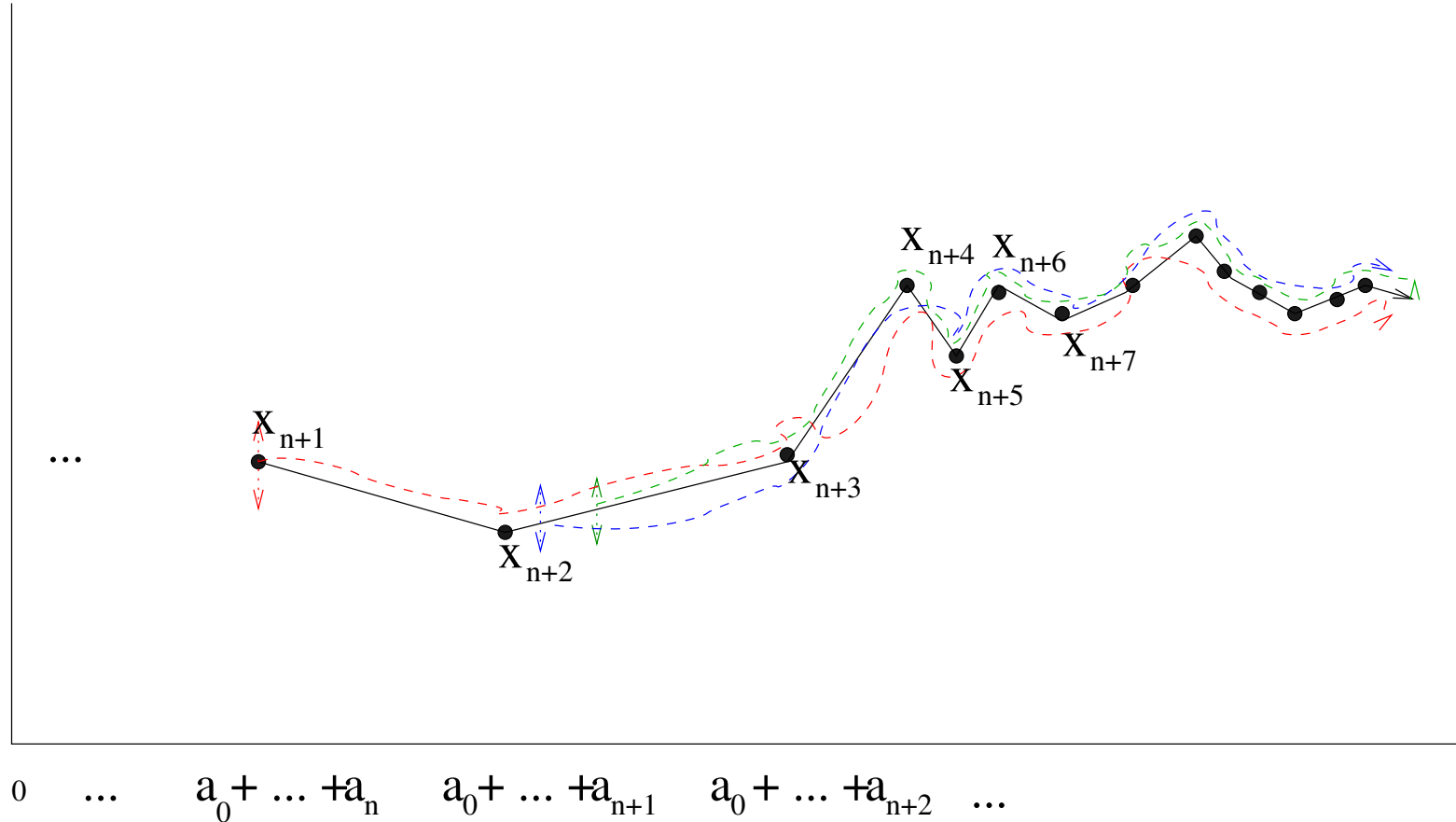0   ... $a_0 + ... + a_n$ $a_0 + ... + a_{n+1}$ $a_0 + ... + a_{n+2}$ ...

time

o.d.e. trajectories with staring points on the iterate−trajectory.