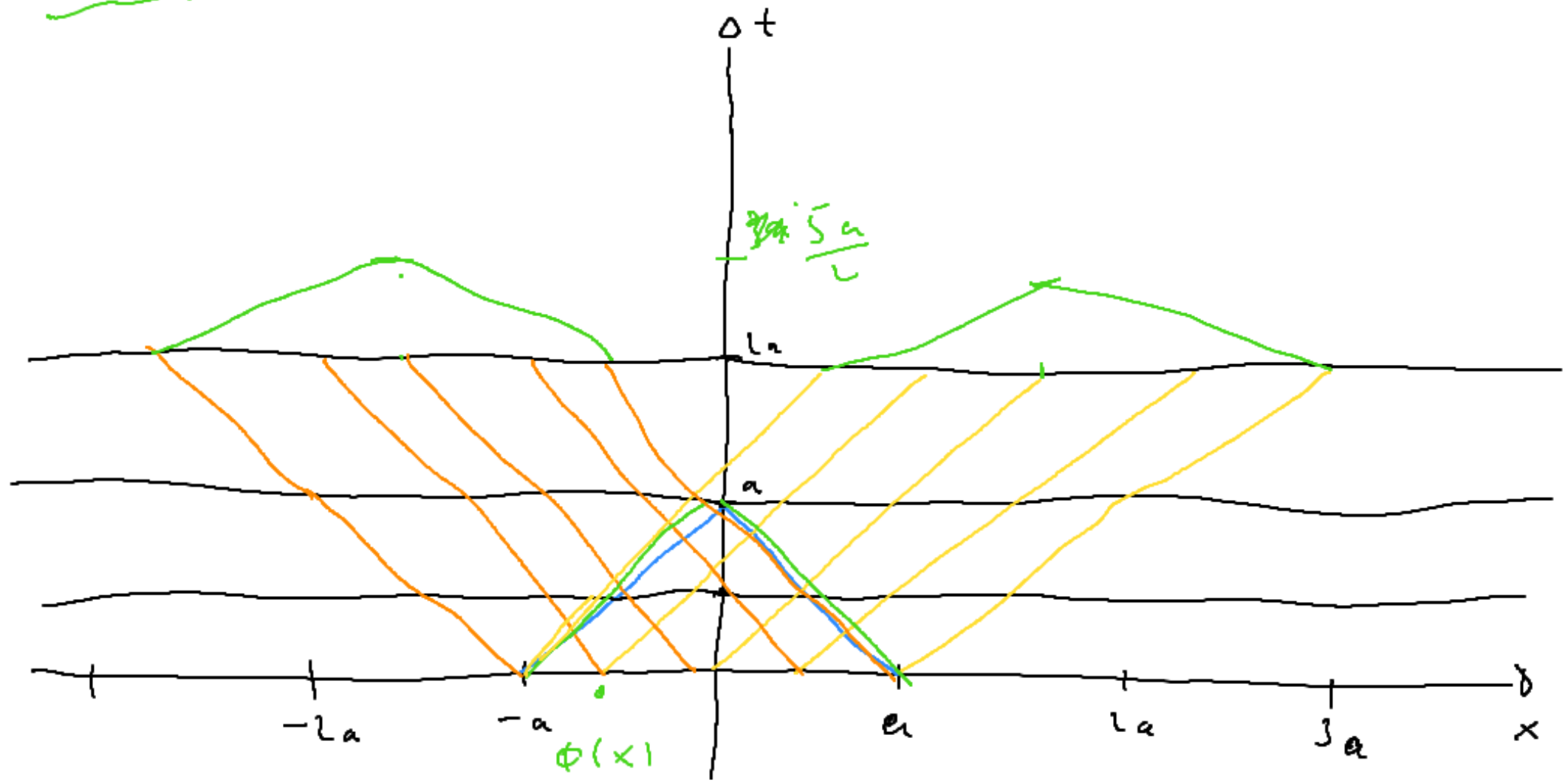


$c = 1$



$$\mathcal{J}_t: \phi \mapsto u_t(x, \cdot)$$

$$\overline{C^1(\mathbb{R})} \quad C^2(\mathbb{R})$$

$$\|\phi\|_2 = \sqrt{\int \phi^2 dx}$$

$$\|\underbrace{u_t(\cdot, t)}_{\mathcal{J}_t(\phi)} - u_t(\cdot, t)\|_2 \leq \|\phi^1 - \phi^2\|_2$$

$$d(u^1, u^2) \leq d(\phi^1, \phi^2)$$