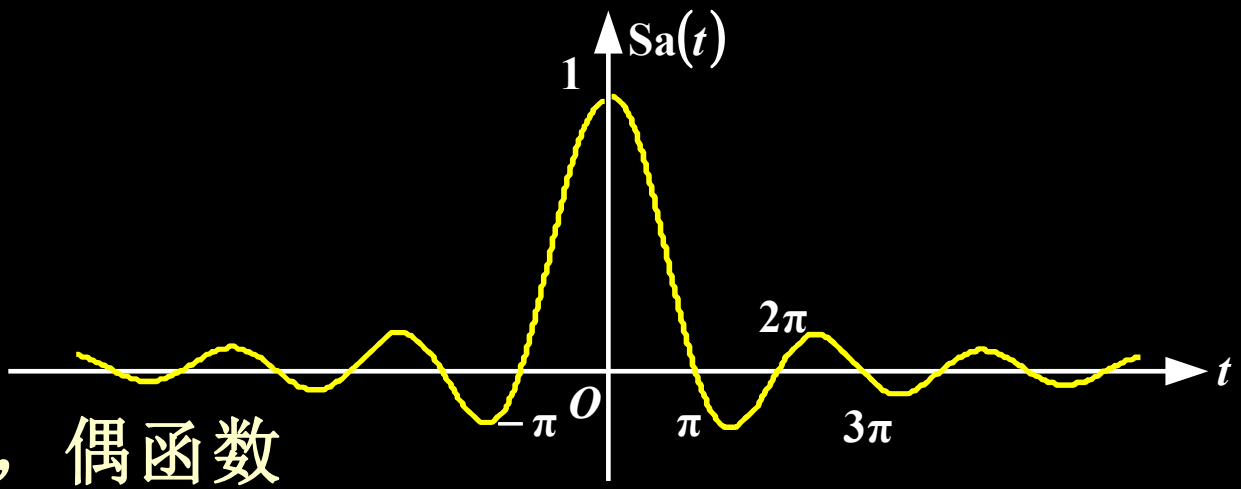
抽样信号(Sampling Signal)

$$\mathrm{Sa}(t)=\frac{\sin t}{t}$$



性质

① $\mathrm{Sa}(-t)=\mathrm{Sa}(t)$, 偶函数

② $t=0, \mathrm{Sa}(t)=1$, 即 $\lim\limits_{t\to 0}\mathrm{Sa}(t)=1$

③ $\mathrm{Sa}(t)=0,\ t=\pm n\pi,\quad n=1,2,3\cdots$

④ $\int_0^{\infty}\frac{\sin t}{t}\mathrm{d}t=\frac{\pi}{2},\quad \int_{-\infty}^{\infty}\frac{\sin t}{t}\mathrm{d}t=\pi$

⑤ $\lim\limits_{t\to\pm\infty}\mathrm{Sa}(t)=0$

⑥ $\mathrm{sinc}(t)=\sin(\pi t)/(\pi t)$