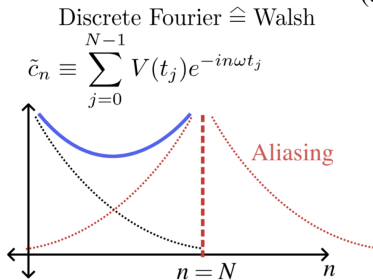
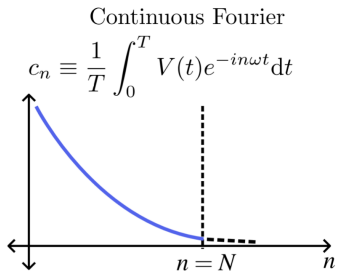
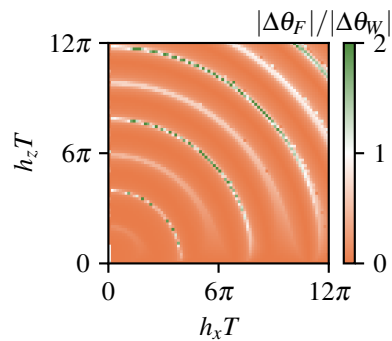
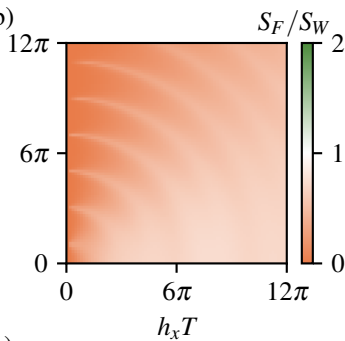


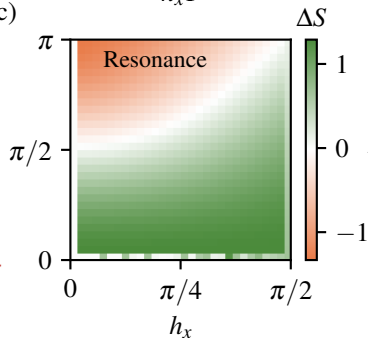
(a)



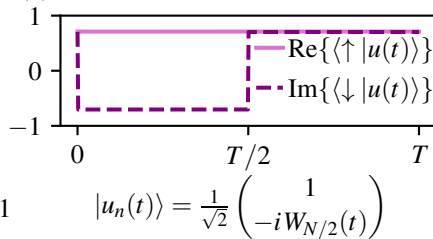
(b)



(c)



(d)



$$|u_n(t)\rangle = \frac{1}{\sqrt{2}} \begin{pmatrix} 1 \\ -iW_{N/2}(t) \end{pmatrix}$$