

Homework - Fourier Analysis App. (B) - (29)

1. Let $F(t) = \lambda e^{-\lambda t}$ ($t \geq 0$), 0 otherwise

Calculate $\hat{F}(\omega)$. Where are the poles? What are the residues?

Recover $F(t)$ from $\hat{F}(\omega)$ via * (p. 24)

2. Consider the chain



For F_2 as in 1.

what is $\lim_{N \rightarrow \infty} (F_{N2})^N$

Interpret.