

$$f_N(t) = \frac{A_0}{2} + \sum_{k=1}^{\infty} \left(\frac{1}{2} (A_k - iB_k) e^{i\alpha t} + \frac{1}{2} (A_k + iB_k) e^{-i\alpha t} \right) \quad (1)$$

$$\text{mit } B_0 = 0 \text{ und } \alpha = \omega t \quad (2)$$