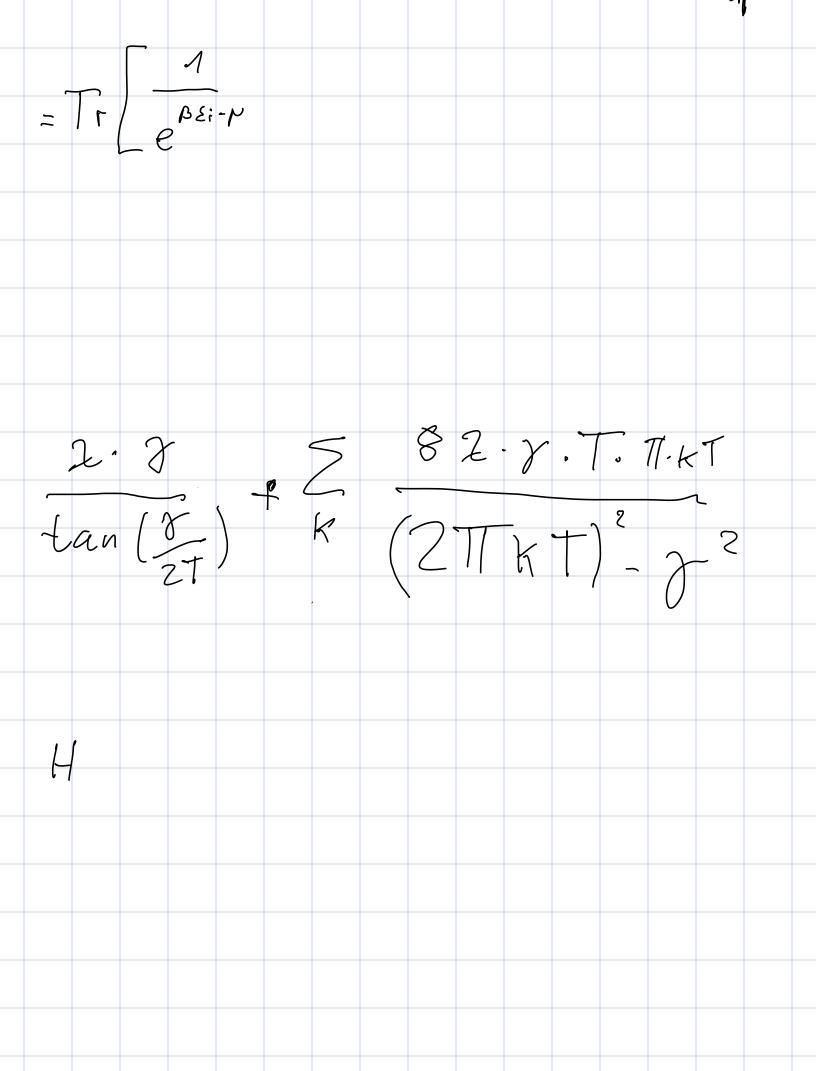
Korrelatur nicle Green GAB (t) = < At Bo>0 = ((1) (col) = [g. en Hot A e in Hot B] $Tr = \frac{1}{2} \frac{1}{2} = \frac{1}{2} \frac{1}{$ β = 1 e^{βεη-}ρΝ | 1η><η1 Rei Corenzia J: brecke m und N 8 = gin Meinem \$100 = n, B1n) = m f(w) = (w-wo2/272002 Spekdraldichte = G - G Spektraltheorem Spektial theorem $\langle B(o) \hat{A}(t) \rangle = \sqrt{2\pi} \int dE e^{-\frac{1}{2}Et} \int (\omega) dE = \sqrt{2\pi}$



 $H_0 = \sum w_k a_k^{\dagger} a_k \rightarrow$ (ao act) = CHo ar CHo o e Hot ar e Hot intercting picture complex time 9 KR # E-T') = (0 (t-t) (1 + nn) + 0 (t'-t) nB), EERTE-T) GKK(iwm) - iwm-EK (1+NB) e rub e E k B 1) IWM - EK

 $\langle a_{\kappa} a_{\kappa} \rangle = \langle n_{\kappa} \rangle = n_{\beta}(\epsilon_{\kappa})$ Lorenzian peaks Fourver / Lackenz transom of spectral downty Markon fall C(t) = 7 y e - y t Josephus Jos

Fourier transform C(+1) $\int (w) \int n(w) e^{-i\omega t} \int (1+n(w)) e^{-i\omega t}$ $\int_{S} g^{2} \left(\cos \left(\omega + t \right) \cdot \cosh \left(\frac{\omega}{2} \right) - i \sin \left(\omega \tau \right) \right) du$ $= \frac{1}{2} \left(\frac{1}{2}$

$$= nb \cdot (\cos(\omega t) + i\sin(\omega t))$$

$$= (nb+1)(\cos(\omega t) - i\sin(\omega t))$$

$$Re[C] = \frac{3}{2}(2nb+1) \cos(\omega t)$$

$$Im[C] = Sin.(\omega t), og^{2}$$

