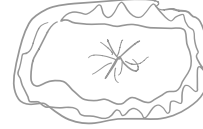


# Adhokarek

\* GAS IDEALA ; mawotawotke partikula partikulare

MULTI SPATIALS MIKROKANONIKAL

FASE-TERPANGGAT  
Makro  $N, V, E (\approx E)$   
Mikro

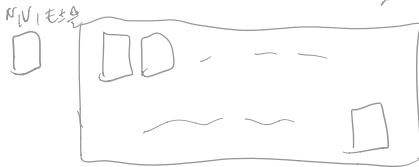


$$\vec{q}^N \in V$$

$$E \in [E - \frac{1}{2}\Delta, E + \frac{1}{2}\Delta]$$

$$\omega$$

$$\int \int d^3q d^3p$$



$q_p, 3D$

$$E = \sum_{i=1}^N \frac{1}{2m} (p_{ix}^2 + p_{iy}^2 + p_{iz}^2)$$

$$\int \dots \int d^3q$$

$$V^N$$

$$E - \frac{1}{2}\Delta \leq \sum_{i=1}^N \frac{p_i^2}{2m} \leq E + \frac{1}{2}\Delta$$

interpretasi  
kecil

$$\omega \approx \frac{\Delta}{E} V^N \frac{(2\pi m E)^{\frac{3N}{2}}}{[(\frac{3N}{2} - 1)!]}$$

fase-ruang volume  
mikroskopis konstanta proporsional

→ alternatif  
untuk partikel  
mawotawotke  
mikroskopis konstanta

$$\Gamma \equiv \frac{\omega}{\omega_0}$$

makro-gradus konstanta  $\equiv N$   
 $\omega_0 = h$

