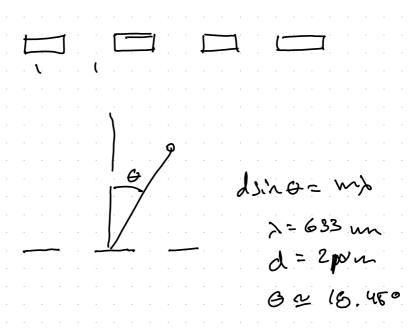
grating interferometer



Path define = wh

$$E(0) = E_0 \sum_{N=-N}^{N} \int_{a}^{a} e^{i(k(nd+2k)) Sino)} dx$$

$$2 \in O\left(\frac{1}{2} \text{ liked sho}\right) \left(\int_{A}^{A} \text{ in 22 in $6} da\right)$$

=
$$E_0\left(\frac{\sin\left((N+\frac{1}{2})kd\sin\theta\right)}{\sin\left(\frac{1}{2}ka\sin\theta\right)}\right)\left(\frac{2a}{2a}\frac{\sinh\left(ka\sin\theta\right)}{ka\sin\theta}\right)$$

$$\int_{0}^{\infty} \left(\frac{1}{2}ka\sin\theta\right)^{2}$$

(wt - Kind) = Bo exp (-i how) exp(wt) E= Eo exp (i >1/0= Y1 No=1422 1/2= V(4,+20)2+22 E = to eap(wt)exp(infr) E: 250 explores exp (ik (4,400) 2+22) E = 6 enfine) { enp(in(4-x12+22))

AB = (nd+x) sing 300mm 290kote

24(k) 2 Dx exp(naft)

Sino) de x = Eo E exp(ik Ind sino) x) dix x sino da

Azk zih $\frac{\int_{0}^{2} k^{2} h^{2}}{\int_{0}^{2} k^{2} h^{2}} \int_{0}^{2} k^{2} h^{2} h^{2}$ E, exp (Not-kx) 2 resp (ikxalt) sine) sin (Kashe)
Kusine $E(\theta)=E6$ (sin (N+1/e)/kd sine) \times Sin(1/2 kd sine) 2 lexp (ikx (4) sive) sin (hashe) d (up (i(w+) E(6)= EO (Sin (N+1/2) kd since) (2 Sin(ka since))

Sin (1/2 kd since) (2 Sin(ka since))

Anolithus × exp(i (w+ + 1 kzd4)sine) (cn 6, 218 dy 0.30 dizzlan attenden Sin 6, = 0.30 $E(e) = E_0 \frac{\sin(\pi t/2) d}{\sin(\pi t/2) d} \times 2 \frac{\sin(\pi t/2) a}{\sin(\pi t/2) d}$ × endi(w++ 222dor) some) d= 1pm 62 d(220.5pm >= 633 um N= 50 Sin6= m> 100pm (V.10

