- 30. P点处 S_1 与 S_3 振动反相,振幅相同,叠加后完全抵消,由 S_2 引起的振动: $y_p=y_{2o}=Acos\omega(t-\frac{S_2P}{u})=Acos(\omega t-8\pi)=Acos\omega t$
- 31. 取屏幕上坐标轴 O_x ,上正下负,原点为双缝对称中心, k^{th} 明纹中心位置为:x= $rac{\pm krac{D}{d}\lambda}{k^{th}}$ 与 $k+1^{th}$ 明纹中心间隔: $\Delta x=(k+1)rac{D}{d}\lambda-krac{D}{d}\lambda=rac{D}{d}\lambda$

 $\lambda = rac{\Delta x}{D}d = 545nm$ 若 $\Delta x \geq 5mm, \Delta = rac{D}{d}\lambda \geq 5mm$ 得 $d = rac{D}{\Delta x}\lambda \leq 0.27mm$