

section4_Ex.7

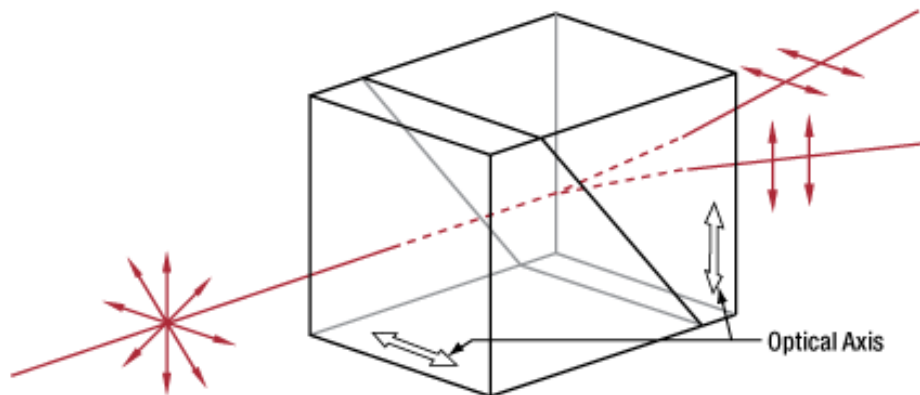
2024/07/05

M1 Kensho Tanaka

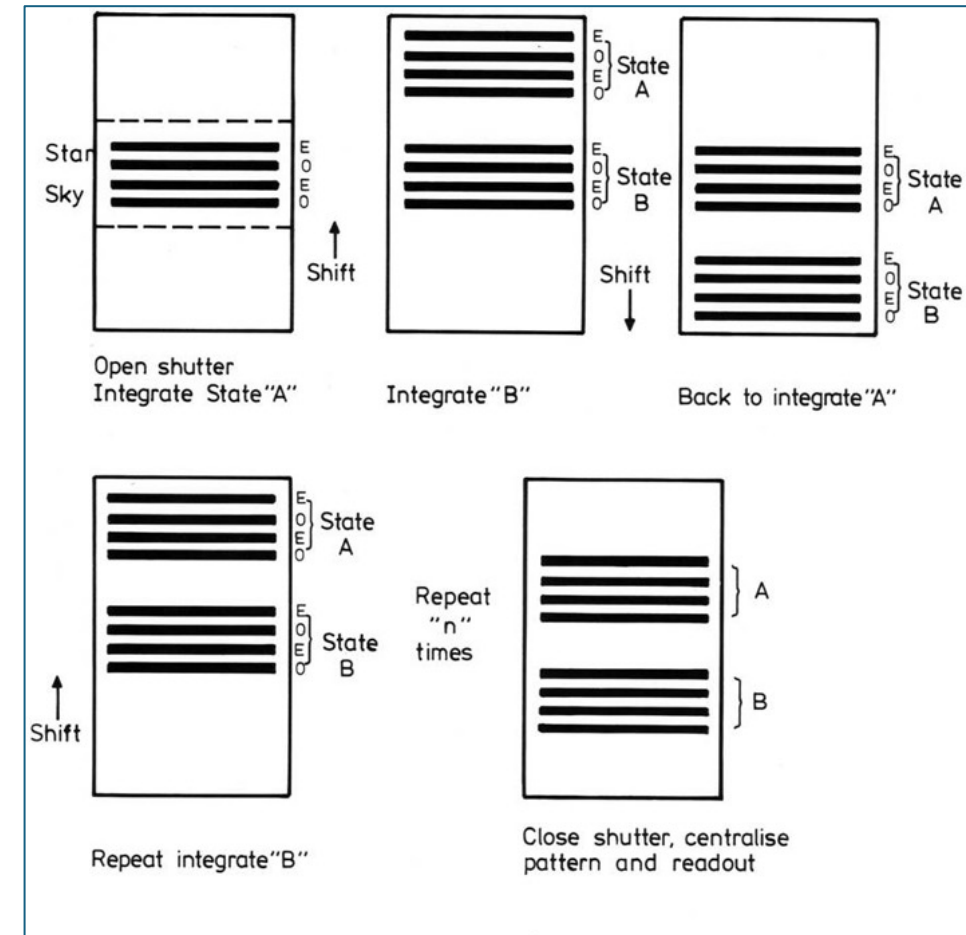
7. What instruments could you use to prove that the light from Crab Nebula supernova remnant was due to non-thermal emission from the process called synchrotron radiation?

- Synchrotron radiation has polarization.

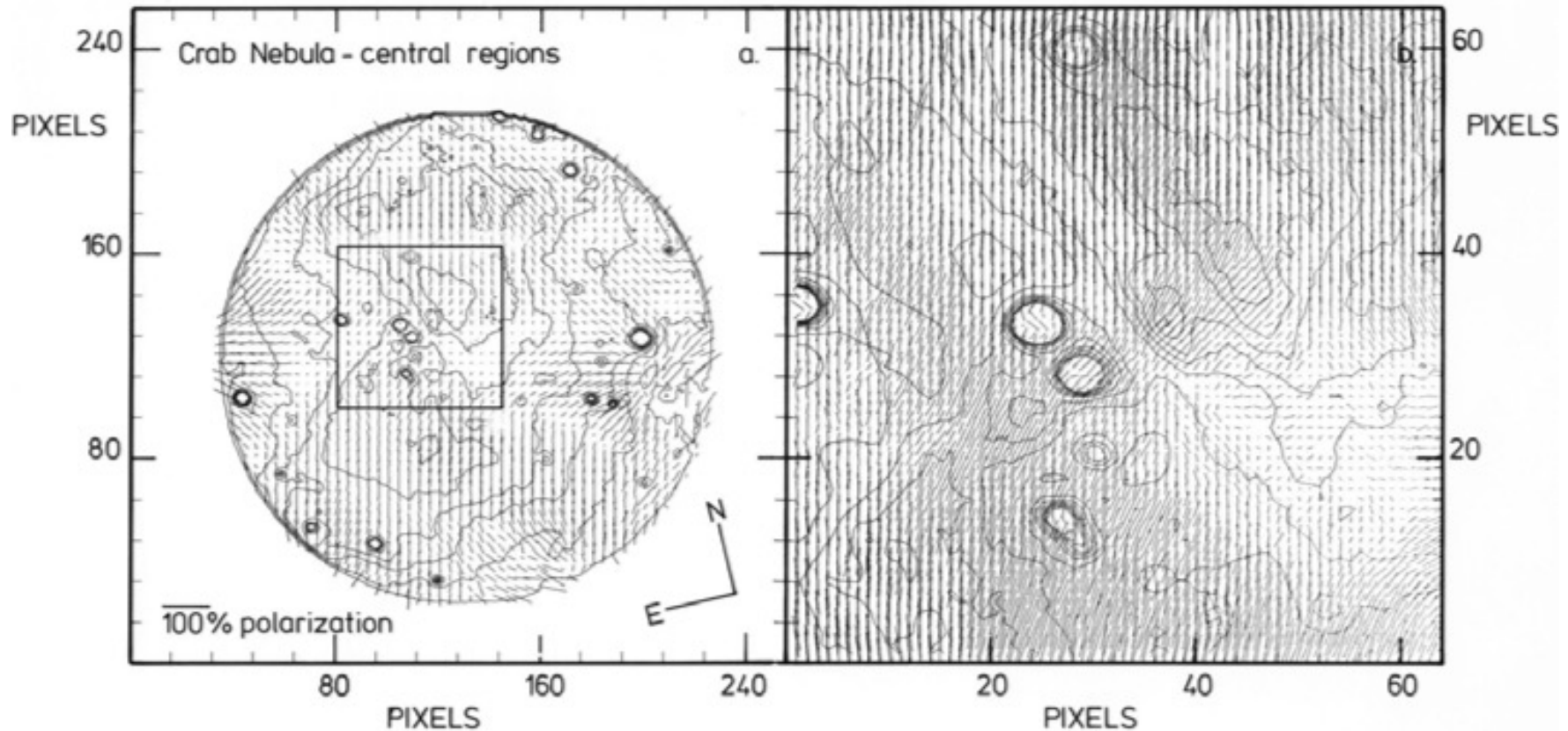
- use polarization modulator.
 - split the light into O and E rays.
 - such as Wollaston prism
- CCD
 - charge shift
 - measure each component of polarization



Wollaston prism



7. What instruments could you use to prove that the light from Crab Nebula supernova remnant was due to non-thermal emission from the process called synchrotron radiation?



Reference

- THORLABS

https://www.thorlabs.co.jp/newgrouppage9.cfm?objectgroup_id=917