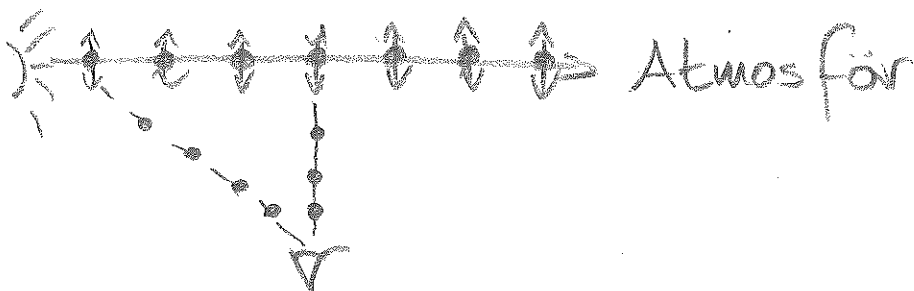
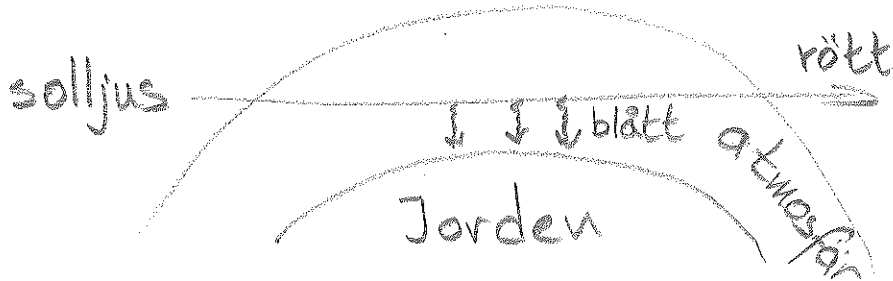


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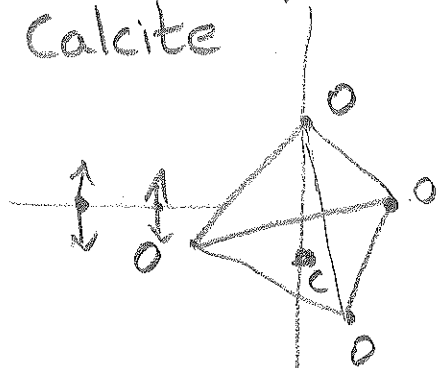
Spridning

Solljus sprids i atmosfären

Korta våglängder sprids mer $I_s \propto \frac{1}{\lambda^4}$



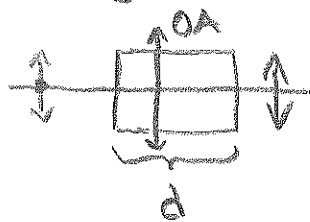
Dubbelbrytande material Calcite



I mot OA \Rightarrow två brytningsindex
 $n_{\parallel} \cdot n_{\perp}$

OA (optisk axel)

Vågplattor



Olika brytningsindex \Rightarrow olika optisk våglängd

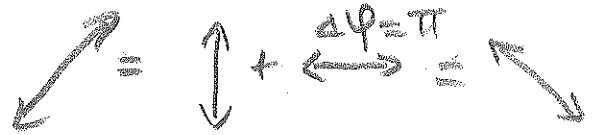
$$\Delta = |n_{\perp} - n_{\parallel}| d$$

$$\Delta\psi = \frac{2\pi}{\lambda} \cdot \Delta = \frac{2\pi}{\lambda} |n_{\perp} - n_{\parallel}| d$$

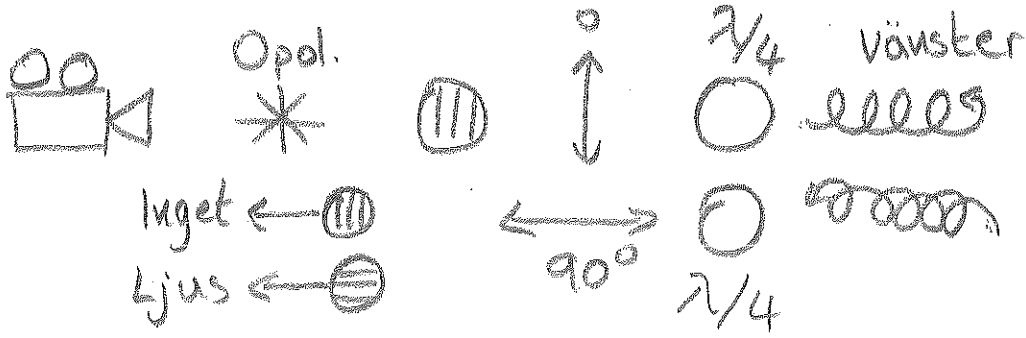
Om $\Delta\psi = \frac{\pi}{2} \Rightarrow$ kvartsvåglängd / kvartsvågsplatta

t.ex $\begin{matrix} \nearrow \\ \searrow \end{matrix} = \begin{matrix} \updownarrow \\ \leftarrow \rightarrow \end{matrix} + \frac{\Delta\psi = \frac{\pi}{2}}{2} = \bigcirc$

$\Delta\psi = \pi \Rightarrow$ Halv vågsplatta



3D-Bio



Bröduk