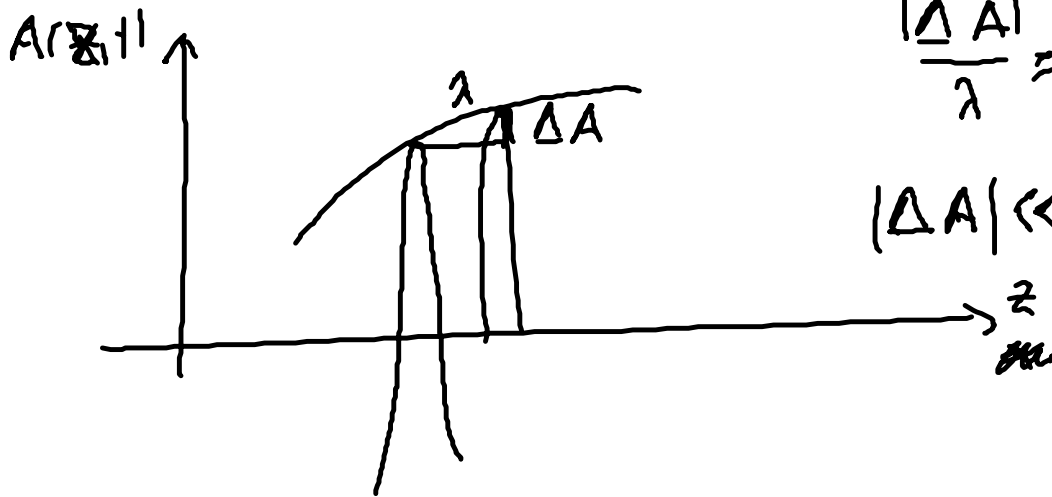


## 4.3 Solitonen



$$\frac{|\Delta A|}{\lambda} \approx \left| \frac{\partial A}{\partial z} \right|$$

$$|\Delta A| \ll |A| = \lambda \left| \frac{\partial A}{\partial z} \right| = \frac{2\pi}{k} \left| \frac{\partial A}{\partial z} \right|$$

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$$\text{Dgl: } A'' + i2kA' + i2kk'\dot{A} - (k'' + kk''')\ddot{A} = -\frac{\epsilon_2 \omega^2}{c^2} \alpha |A|^2 A$$