BASICS

MR Signal

Coil

B

z

NMR Signal

x

Transverse magnetization
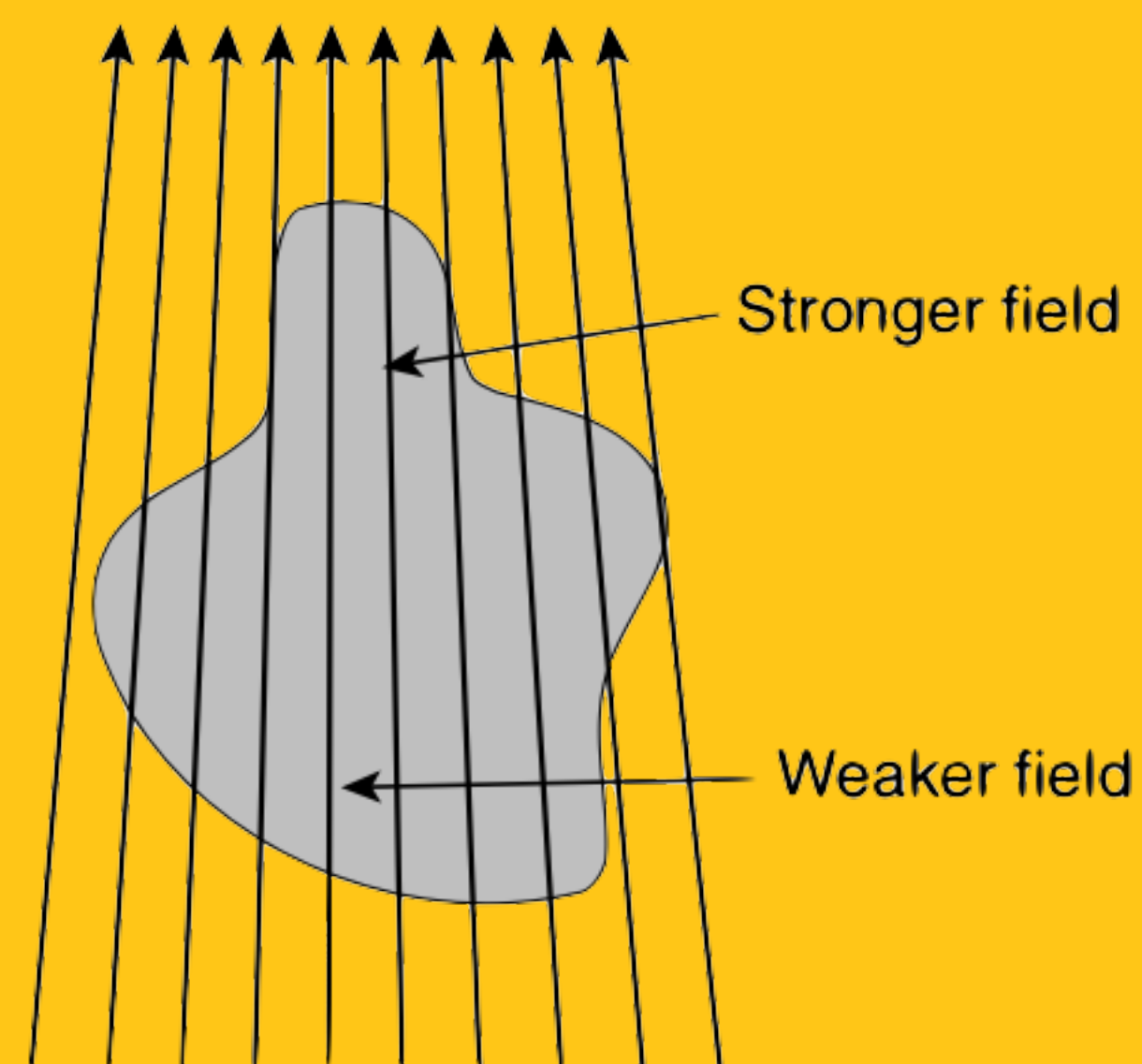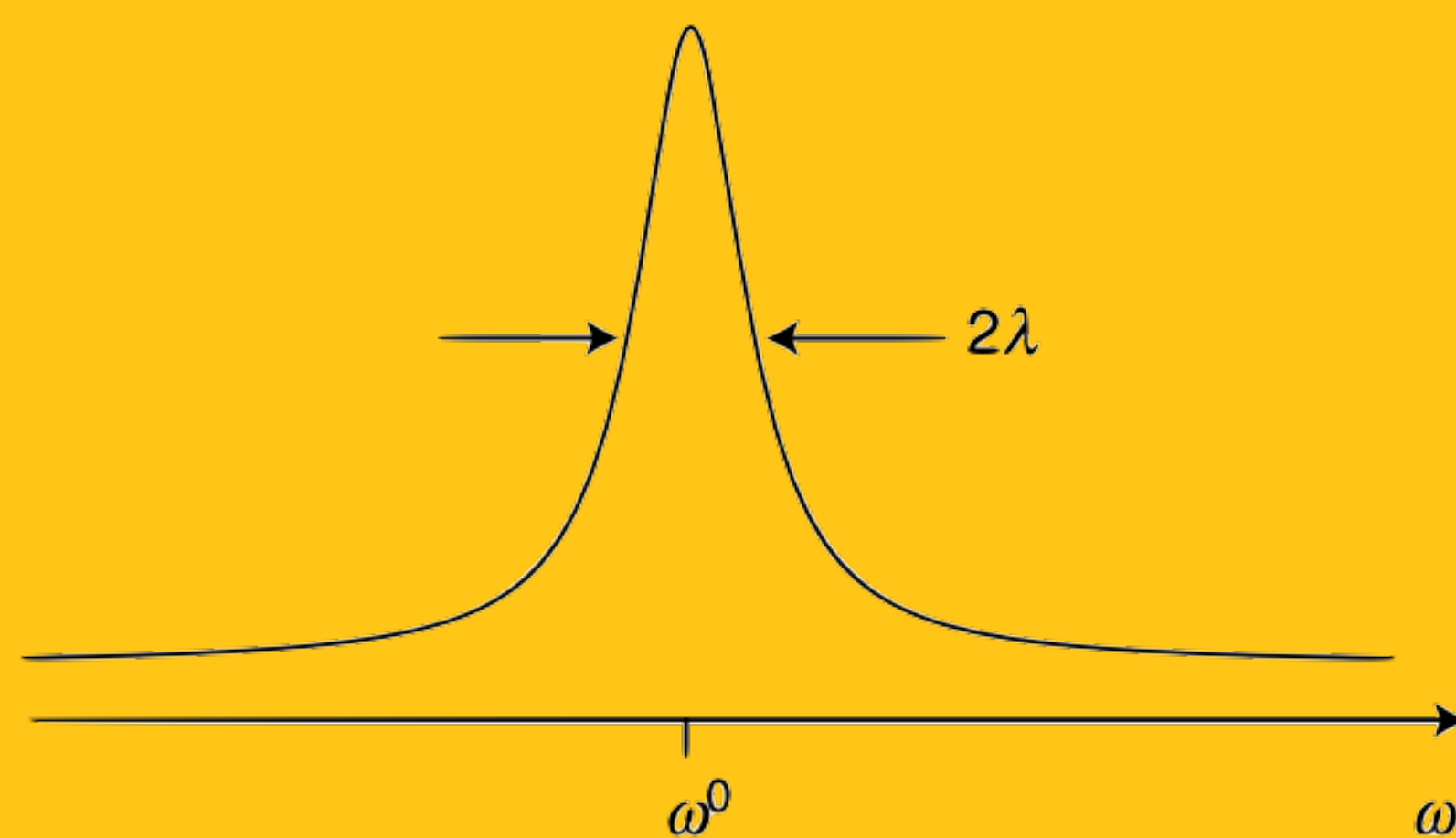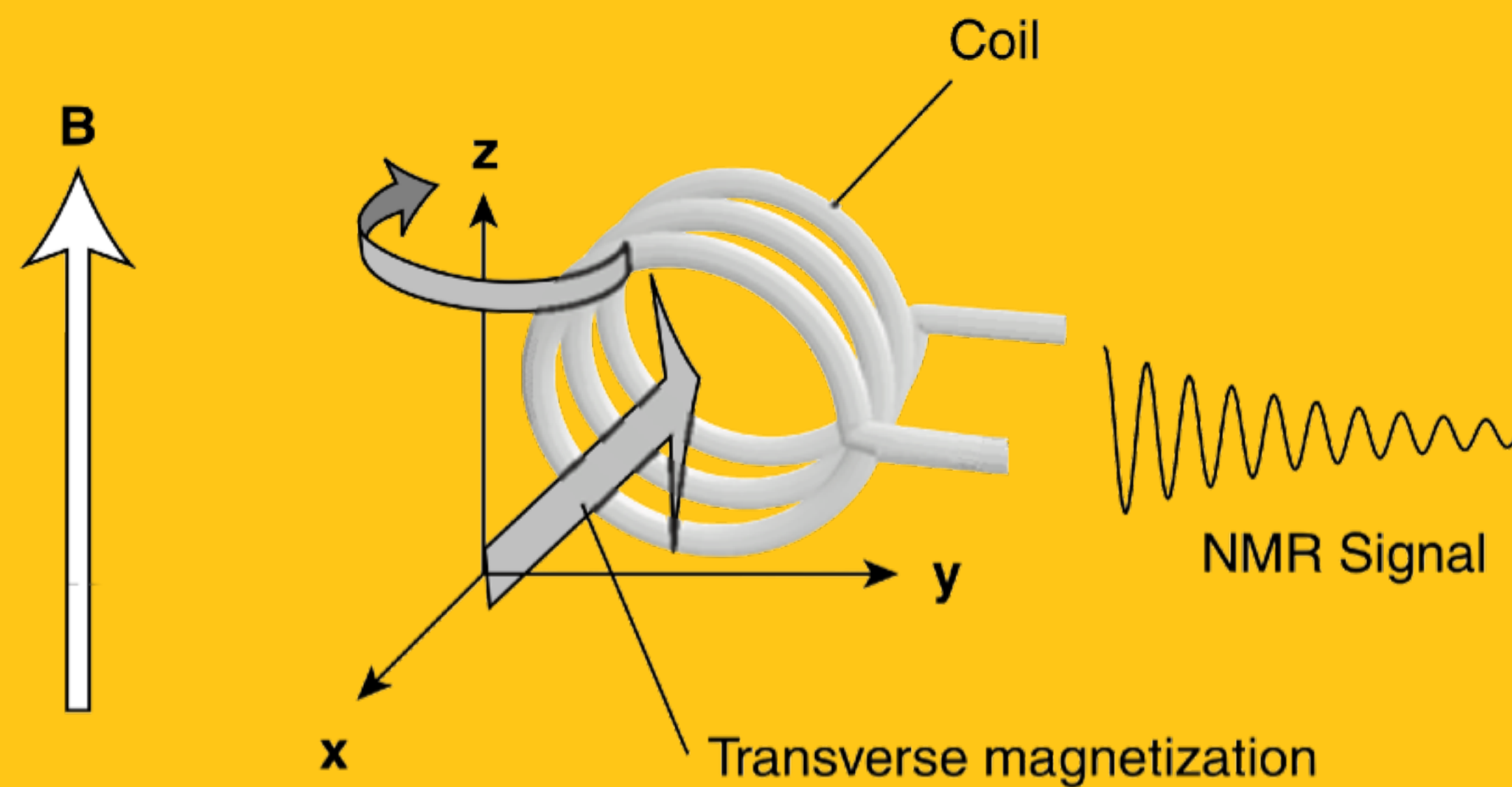
2λ

ω^0

ω

Stronger field

Weaker field

BASICS

Gradients

$$\mathbf{B}(\mathbf{r}) = B^0 \mathbf{e}_z$$

$$\mathbf{B}(\mathbf{r}) = B^0 \mathbf{e}_z + G_x x \mathbf{e}_z$$

Weak field

Strong field