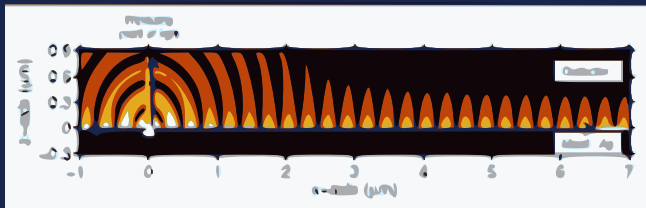


## Analogy with Water Wave



$\delta_{\text{diel}}$

How far into the dielectric the surface plasmon wave extends

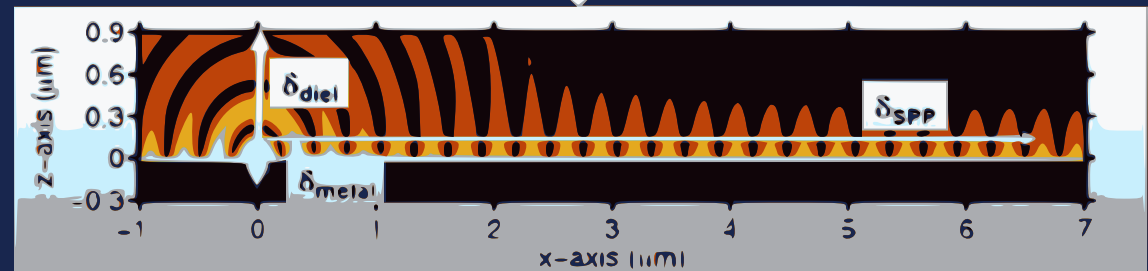
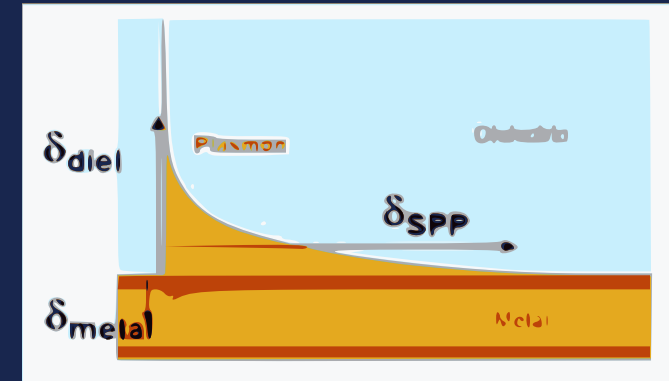
$\delta_{\text{metal}}$

How far into the metal the surface plasmon wave extends

$\delta_{\text{SPP}}$

How far from the excitation point the surface plasmon wave can travel along the interface of metal and dielectric

3



$\delta_{\text{diel}}$

Evanescent in Dielectric

$\delta_{\text{metal}}$

Evanescent in the Metal

$\delta_{\text{SPP}}$

Surface Plasmon Propagation