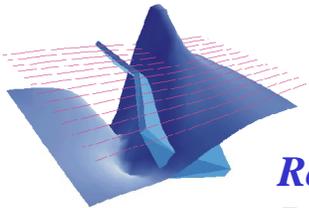


# “Exploring for Groundwater with Electromagnetic Methods”

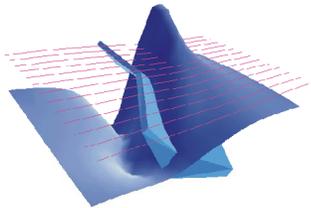
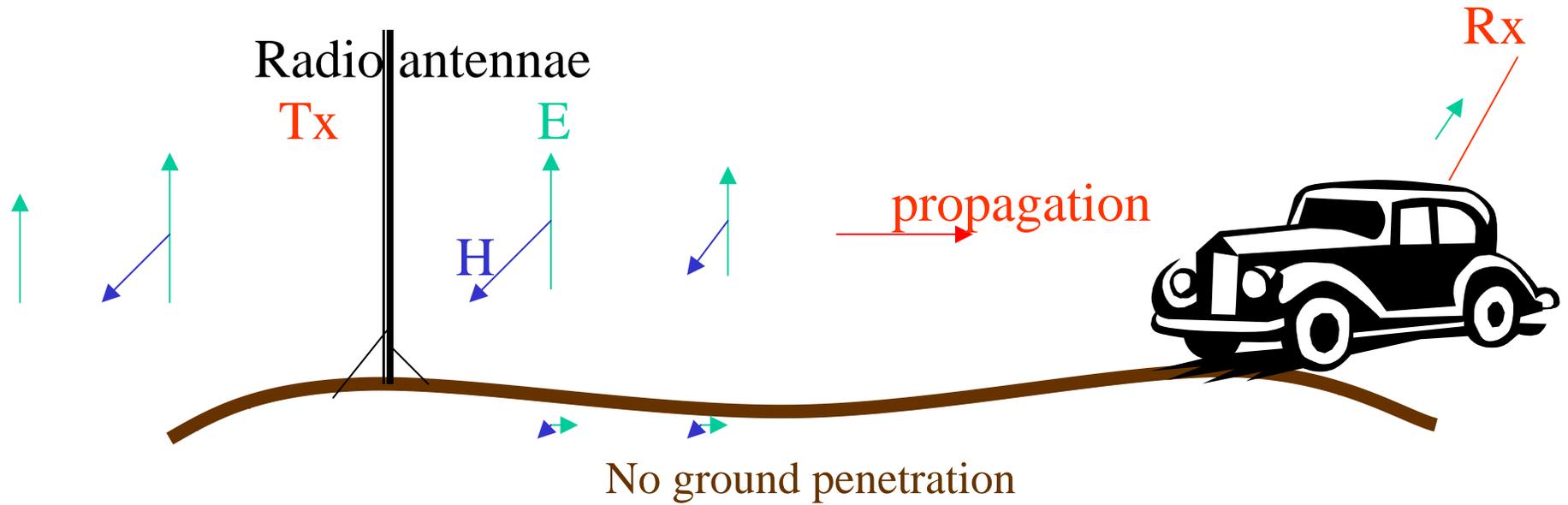
- ⊕ Electromagnetic antennae
- ⊕ Electromagnetic radiation patterns in the ground
- ⊕ How electromagnetic systems “see” into the earth



*Ross Groom, PhD*  
*PetRos EiKon Inc*

# Antennae

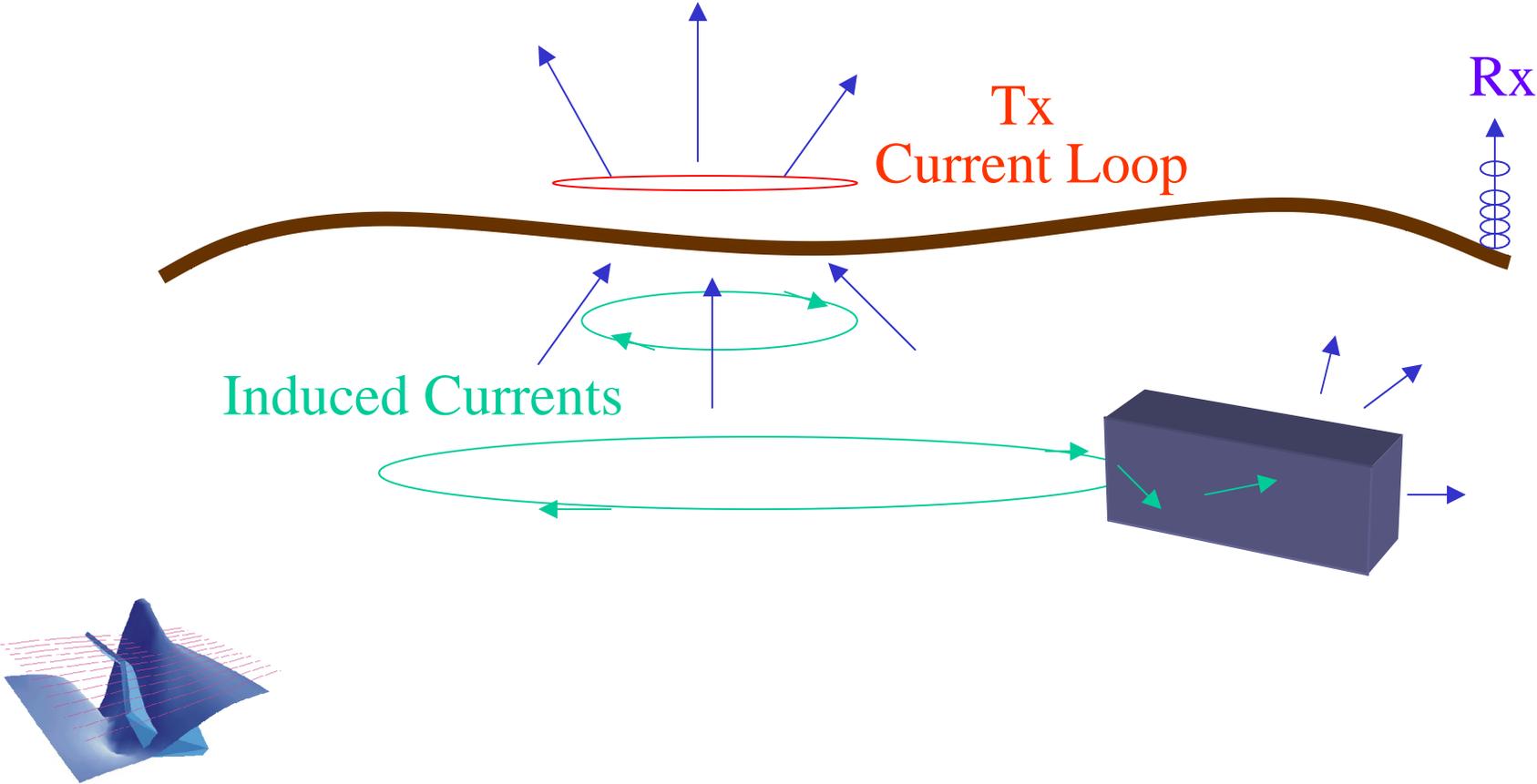
## “How to Measure EM Fields”



# Antennae

## “How to Measure EM Fields”

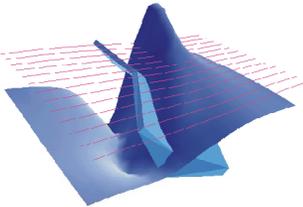
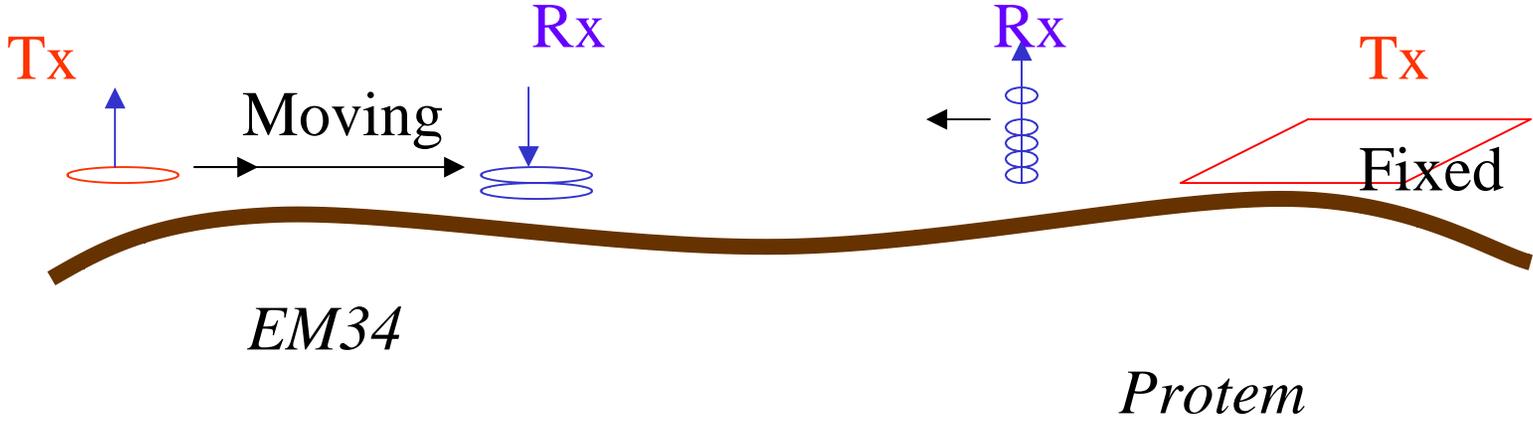
### Geophysical Antennae



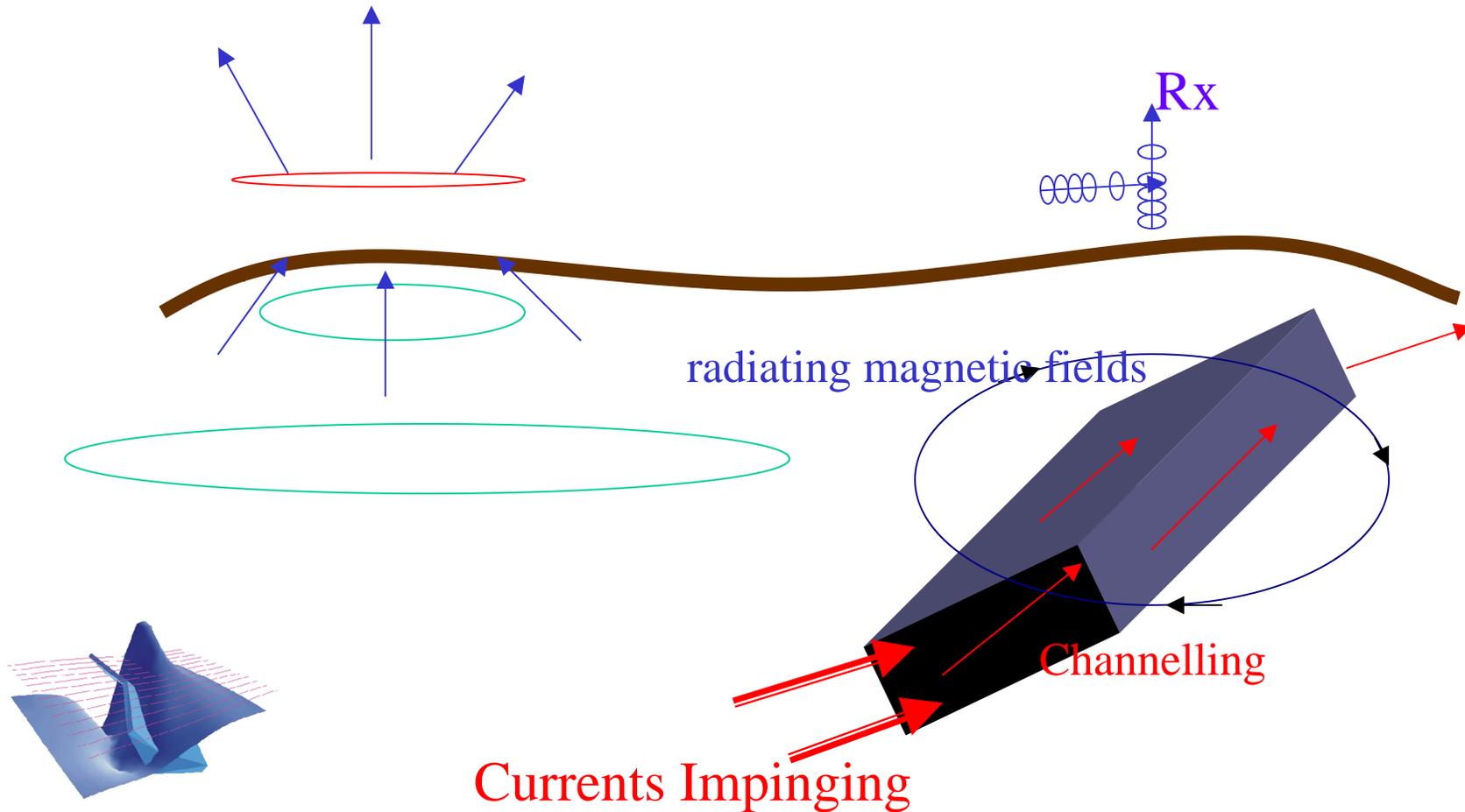
# Antennae

## “How to Measure EM Fields”

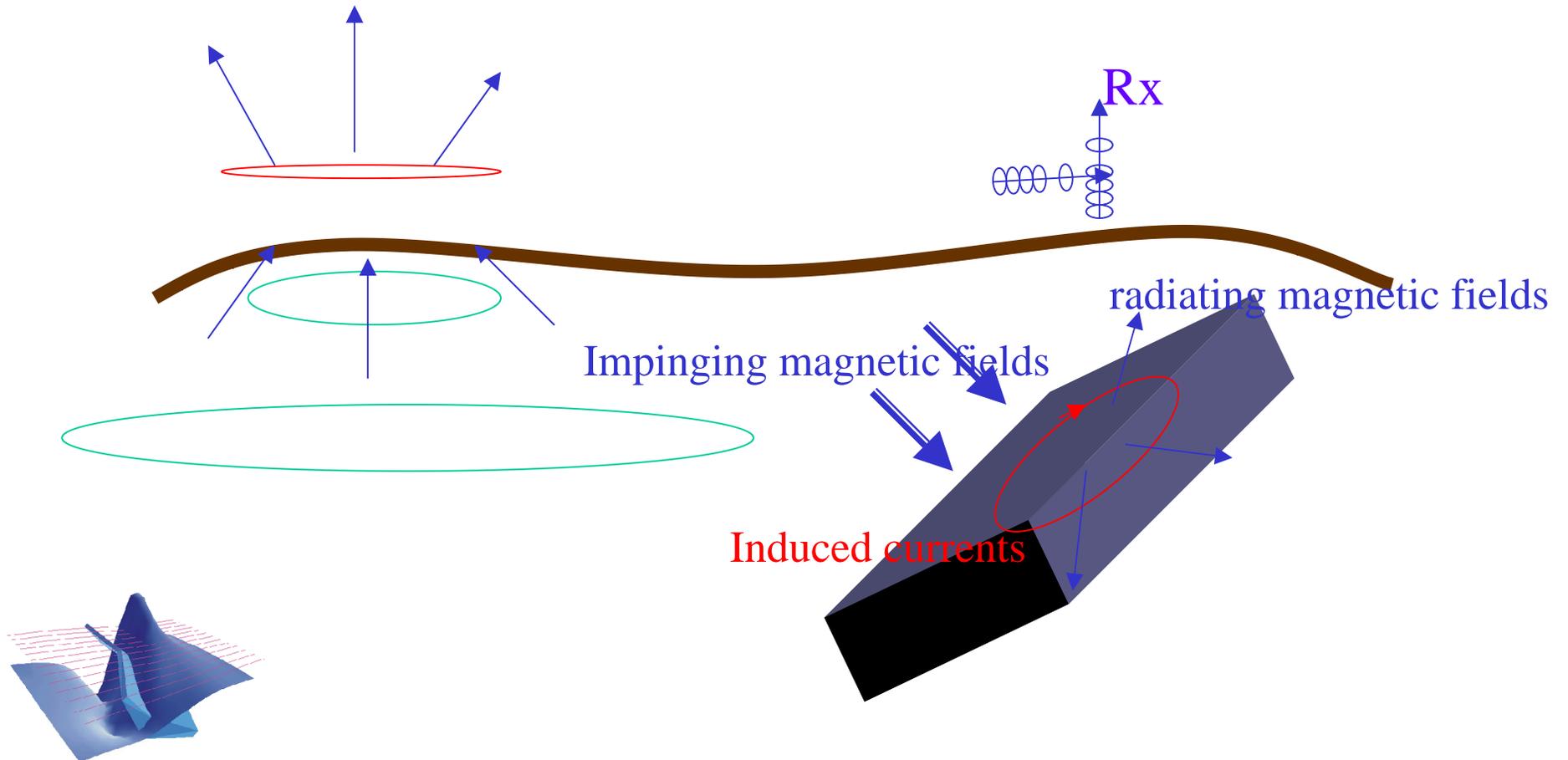
### Geophysical Antennae



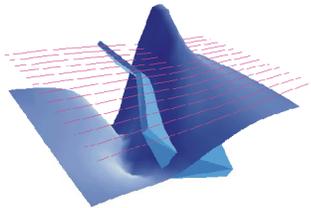
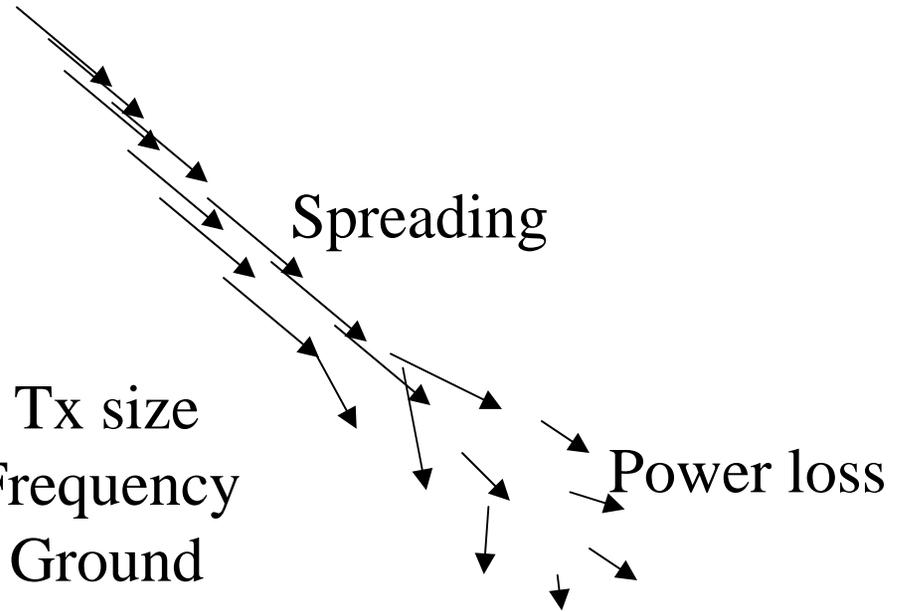
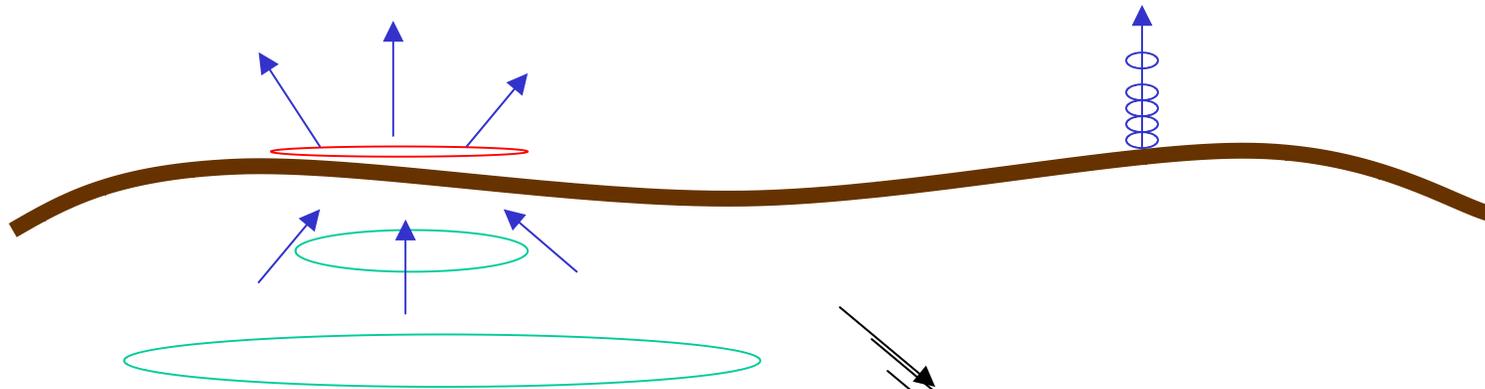
# Wavefield Scattering “EM Fields”



# Wavefield Scattering “EM Fields”

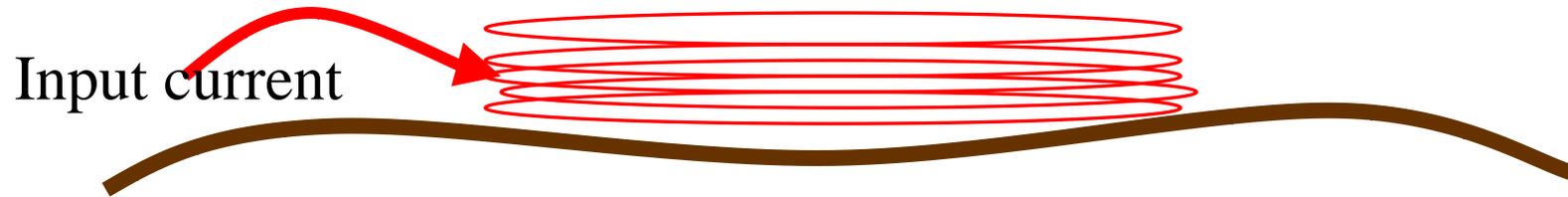


# Depth of Penetration “EM Fields”

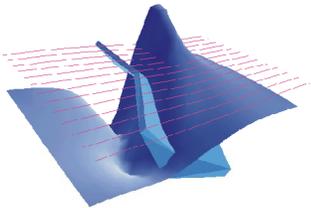


# Depth of Penetration “EM Fields”

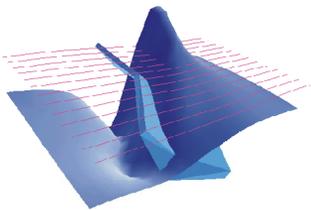
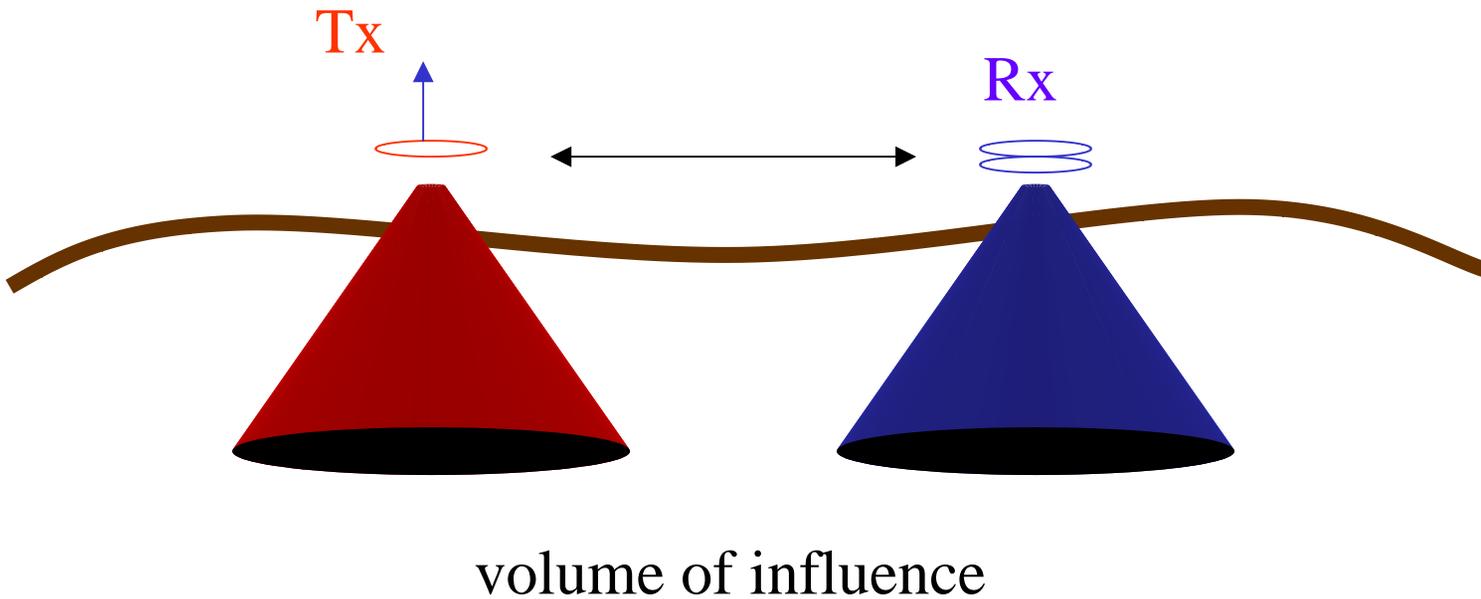
Transmitter power



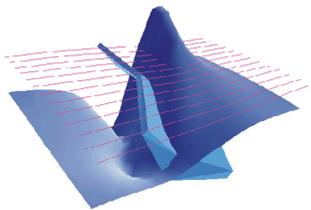
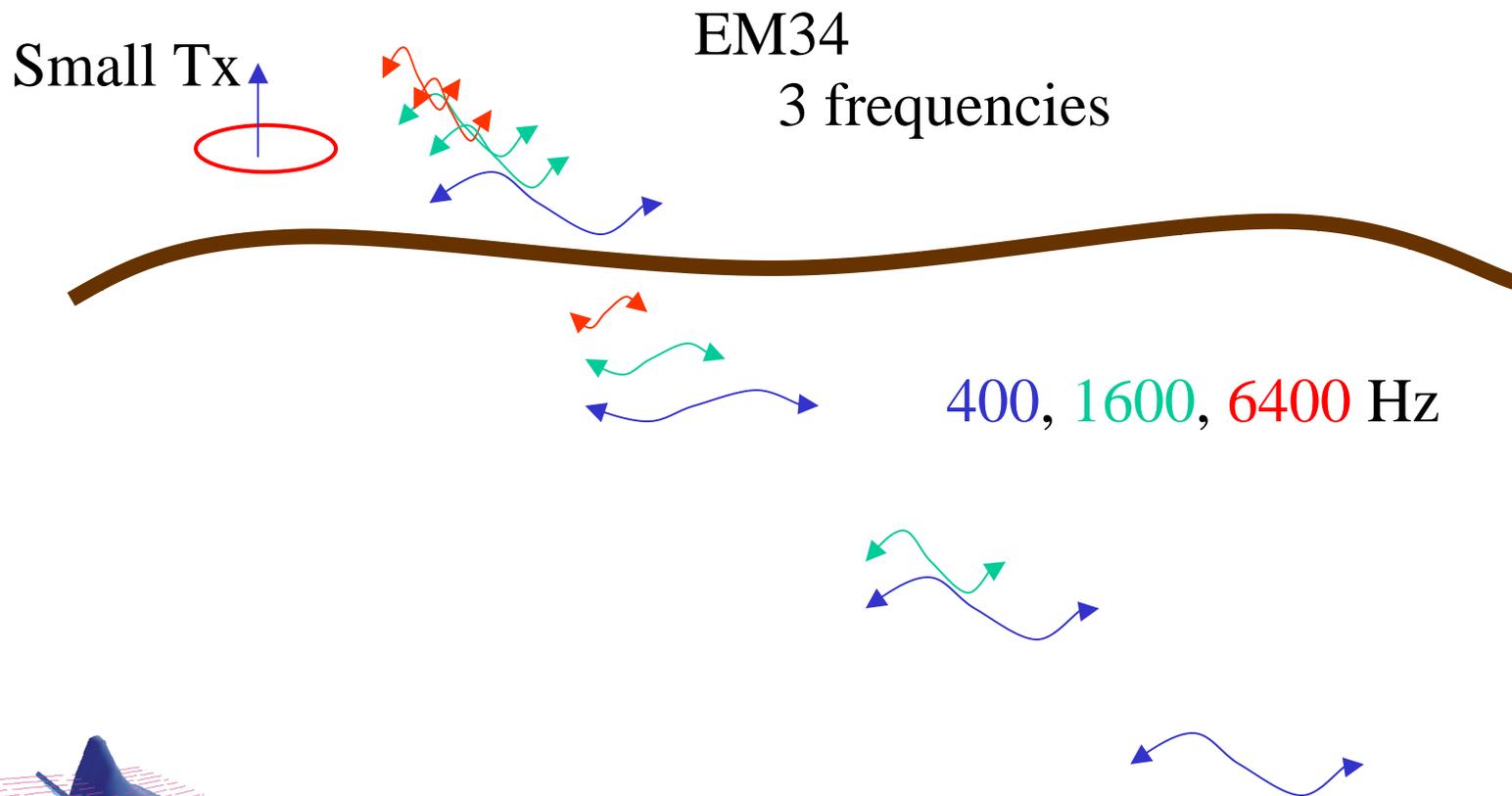
Area x Current x #turns



# Depth of Penetration “EM Fields”



# Frequency Domain vs Time Domain “EM Fields”



# Frequency Domain vs Time Domain “EM Fields”

