

# The Propagation Channel

The propagation channel - The space between the antennas!



- \* Ideally, the channel is **free-space** (i.e., nothing).
- \* In reality, the channel is full of **stuff** !  
E.G., buildings, trees, rain, plasma, gasses, and the earth.

**Problem :** This "stuff" modifies the **propagating** wave.  
Therefore, we must consider the e.m. phenomena of:

- \* **scattering**
- \* **refraction**
- \* **reflection**
- \* **diffraction**
- \* **extinction**

