

# THE ELECTROMAGNETIC SPECTRUM

SELF DC    3Hz    ELF 3KHz    VLF 30KHz    LF/ MF/ HF/ VHF/ UHF    SHF 3GHz    EHF 5GHz 300GHz 430-750THz    30PHz    3EHZ    300EHZ

non-ionizing

ionizing

— wavelength —

$$f \text{ (frequency)} = \frac{c \text{ (speed of light)}}{\lambda \text{ (wavelength)}}$$



**EMF Sources**

												
earth & subways	AC power	CRT monitors	TV	cell phones	cell towers	WiFi	wireless smart meters	microwave ovens	satellites	sunlight	medical x-rays	radioactive sources
		mobile AM/FM				cordless phones						

Gigahertz (GHz) 10<sup>-9</sup>    Terahertz (THz) 10<sup>-12</sup>    Petahertz (PHz) 10<sup>-15</sup>    Exahertz (EHz) 10<sup>-18</sup>    Zetahertz (ZHz) 10<sup>-21</sup>    Yotahertz (YHz) 10<sup>-24</sup>