Radio Astronomy

- Bit of history
- Collecting radio waves
  - How it's done
  - Quantifying the waves
- What makes radio waves?
  - Synchrotron emission
  - Bremsstrahlung
  - Source classes
Black-body spectrum

Emission Mechanisms Dominating Radio Bands

- Synchrotron
- Spectral lines
- Pulsar emission
- Thermal Bremsstrahlung
- Blackbody (Planck Spectrum) - not major contributor!
Radio: thermal bremsstrahlung (and emission lines)

Pulsars

PSR B1937+21:
P = 1.5578064688197945 ms
+/- 0.0000000000000004 ms

Thermal (Blackbody)