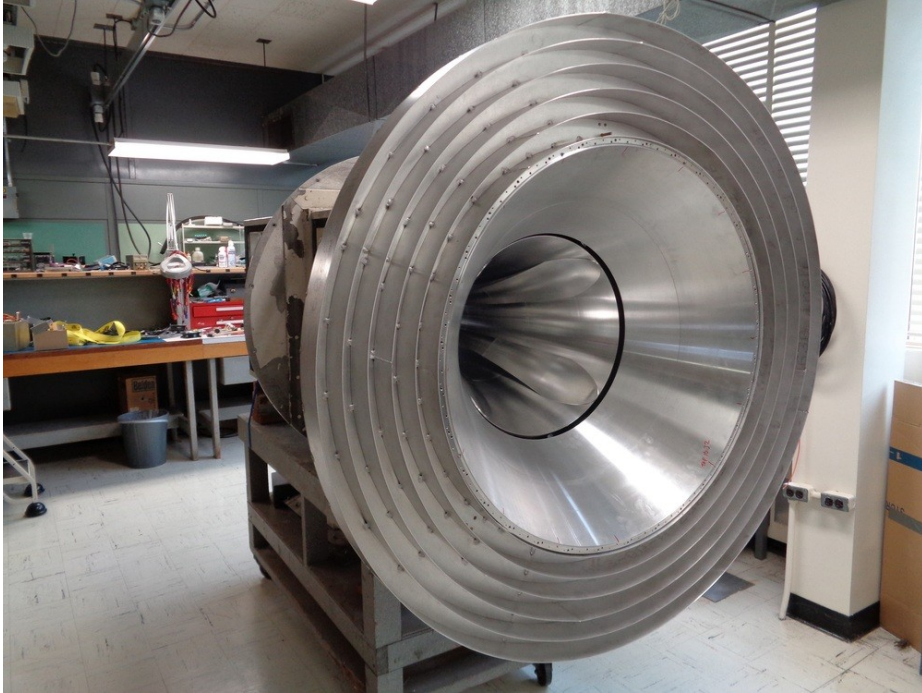# GBT Ultrawideband Receiver

- Frequency Range: 0.7 – 4 GHz

- Max instantaneous bandwidth: 3.3 GHz

- Dual linear polarization

- Target T_{sys}: 30 K

- Target gain: 1.5 – 2 K/Jy

- Supported backends: VEGAS pulsar mode, VEGAS spectral line mode, DCR

- Supports all existing VEGAS modes (pulsar and spectral line) with full 3.3 GHz bandwidth

- **Plan for being available in 23A semester**

GBT Ultrawideband Receiver

- Current status

  - Achieved first light and currently undergoing commissioning

  - Final performance metrics have not yet been determined

- Notes for Proposers

  - *Sensitivity*: Receiver is available in the **GBT sensitivity calculator** but with 25% higher T_{sys} than target value to provide a buffer for time requests

  - *RFI*: Preliminary results indicate that RFI will be no worse than when using other receivers in ~1 – 4 GHz range; standard RFI excision tools should be sufficient. *Expect effective bandwidth to be*

  - *Overhead*: Allow 20 minutes for overhead per session. This includes receiver change *and* pointing and focusing corrections

    - Note: We recommend that *all* observers perform pointing and focusing corrections when using UWBR