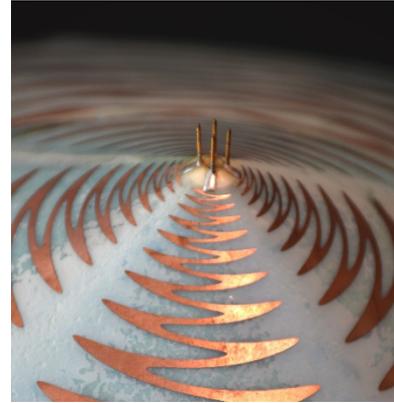
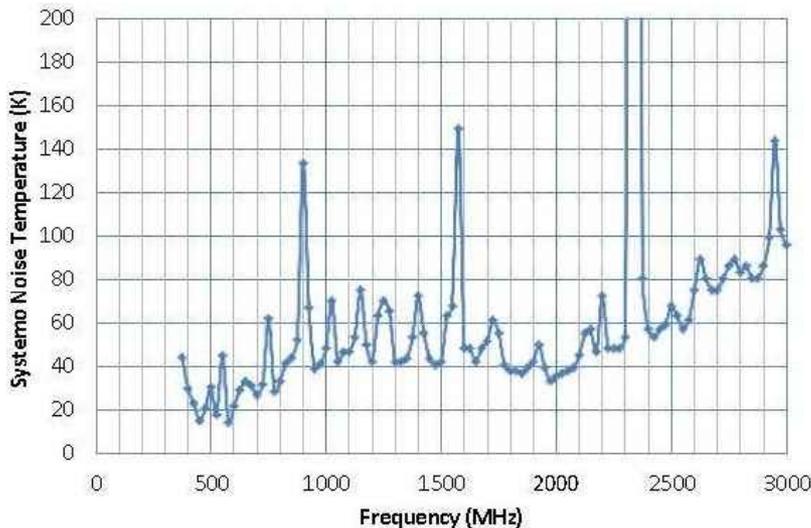


## Why it matters?

- Covers >10:1 frequency range without the need to refocus
- Dual linear polarization
- Dual circular polarization with integrated hybrid coupler
- Smooth beam pattern over band
- Better than -9 dB RL over band
- Low noise with integrated LNAs
- Light weight and easily encapsulated
- No added noise from absorbers



Close up (left) and conical resonators (right) images of the broadband feed. Not pictured: ground plane reflector.



Graph showing simultaneous reception across multiple bands at 900MHz, 1.58 GHz, 2.35GHz and 2.95 GHz

## Key Milestones

- Technology Readiness Level (TRL) 4 - Aug 2018
- Experimental research conducted at Green Bank radio astronomy facility during 2010-2012
- USPTO patent 9,054,416 – Jun 2015
- TBD – Custom LNAs



National Radio Astronomy Observatory  
**Tech Transfer**  
[public.nrao.edu/tech-transfer](http://public.nrao.edu/tech-transfer)  
 434-296-0236  
 tto@nrao.edu

An  
  
 Facility