

# NYU WIRELESS WEBINAR

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WEBINAR 2

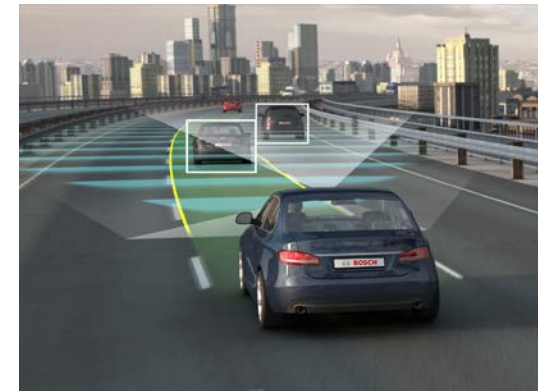
19 DECEMBER 2016

# Research Directions FY2017

- ❑ Maintain deep research in core mmWave
  - Devices, channel models, system & network design
- ❑ Immersive / 360 video and augmented reality
  - Partners in NYU Game Center and NYU-X labs
- ❑ Vehicular technology
  - V2V and V2X
  - Automated driving
  - Seeking partnership with Toyota and others



NYU-X lab: <http://www.nyu-x.org/>



# Proposed Project Areas for FY17

Area	Pis	Funding
MmWave Channel modeling	Rappaport, Mezzavilla	100
Prototyping and simulation software	Rangan, Rappaport	60
Signal processing	Erkip	60
Cellular system design	Rangan, Panwar, Mezzavilla	90
High speed networking and applications	Subramaniam, Yao Wang, Yong Liu, Ramirez	70
Circuits and devices	Sharjerdi, Rakheja	50
Medical	Chris Collins	20
Total		450

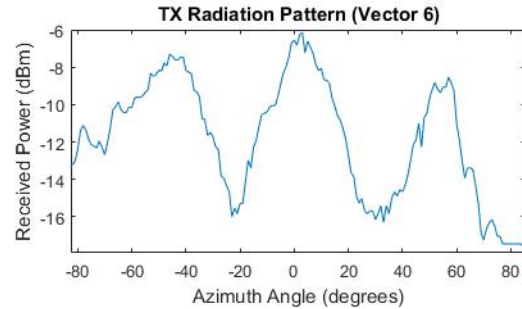
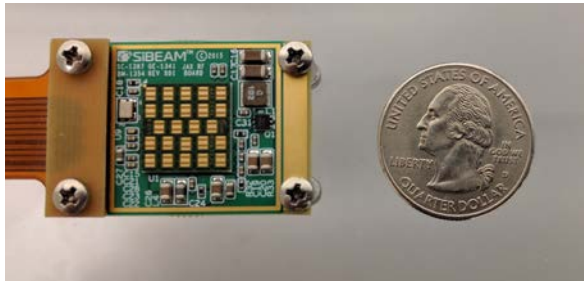


# Proposed Budget FY17

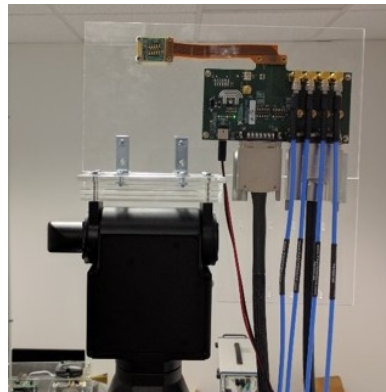
Area	Amount (1000s)	
Revenue	1300	Collected in FY16
Targeted projects	450	
Postdocs. Mezzavilla, Ramirez	123	Includes fringe. Ramirez supported 50%
Faculty disbursements	130	
Visiting scholars	50	M. Chiang (Princeton), M. Zorzi (U Padova)
Total research	753	63% of expenditures
Summit	50	
Staff	306	Donohue, Holsten, Brown
Other	100	
Total expenses	1209	



# 60 GHz Phased Array Software Defined Radio



- ❑ Phased array SDR platform
  - 60 GHz carrier, 1 GHz BW
  - 12 steerable elements
  - 45 degree horizontal steerable range
  - Powerful and flexible NI baseband using LabVIEW FPGA
- ❑ Many projects
  - Dynamic channel models
  - Cell search / synchronization
  - Low latency MAC
- ❑ Funded by \$100k NSF EAGER grant
  - National Instruments and SiBeam
  - PI: S. Rangan, T.S. Rappaport, A. Dhananjay, NYU WIRELESS



# Save the Date!

- ❑ Recruiting day and open house
  - Friday, Jan 27, 2017
  - Meet students for internships and full-time
  - See latest research
  
- ❑ Brooklyn 5G Summit April 19-21, 2017
  - All affiliates invited
  - Bigger space for demos, talks, ...

