NYU WIRELESS WEBINAR

WEBINAR 1
26 OCTOBER 2017
Associate Director: JR Rizzo

- Associate Director for NYU School of Medicine
- Develops technologies for support of low-vision patients
- Great interest for wireless:
  - Combines high bandwidth, edge-computing and AI
- Currently considering project with Huawei
  - With David Ramirez, Post-doc
- Will join directors Rangan, Rappaport and Shasha
Platforms for Advanced Wireless (PAWR)

- NSF project for two large testbed
  - Approximately $10 million each

- NYU, Columbia and Rutgers team in final round
  - Rutgers overall lead. NYU leads mmWave

- 20 block testbed in Upper Manhattan

- Showcases several advanced technologies
  - Cloud RAN, NFV, MmWave, Massive MIMO
  - Applications include VR/AR and autonomous driving

- Seeks strong industry collaboration.
  - Provide testbed for developing new wireless technologies and applications
ComSenTer
Coverged THz Communications Sensing

- Large Multi-University Center likely to be funded by DARPA (Final negotiations)
- Develop THz wireless systems for communication and sensing
  - Thrust 1: Systems (Rangan, NYU lead)
  - Thrust 2: THz IC
  - Thrust 3: THz devices and transistors
  - Massive / multi-point MIMO testbed (at UCB)
  - THz imaging testbed (at UCB)
- UCSB (lead), UT Austin, NYU, UC Berkeley, UCSD
  - Mark Rodwell, UCSB overall lead
- Two PIs from NYU (Rangan, Rappaport)
# Proposed Project Areas for FY18

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<tr>
<th>Area</th>
<th>Pis</th>
<th>Funding</th>
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<tr>
<td>MmWave Channel modeling</td>
<td>Rappaport, Mezzavilla</td>
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<td>Prototyping and simulation software</td>
<td>Rangan, Rappaport</td>
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<td>Signal processing / Massive MIMO</td>
<td>Erkip, Marzetta</td>
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<td>Cellular system design</td>
<td>Rangan, Panwar, Mezzavilla, Zorzi</td>
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<td>High speed networking and applications</td>
<td>Subramaniam, Yao Wang, Yong Liu, Ramirez</td>
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<td>Circuits and devices</td>
<td>Sharjerdi, Rakheja</td>
<td>50</td>
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<tr>
<td>Medical</td>
<td>JR Rizzo</td>
<td>20</td>
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<td>Total</td>
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<td>530</td>
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Save the Date!

- Recruiting day and open house
  - Friday, Jan 26, 2018
  - Meet students for internships and full-time
  - See latest research

- Brooklyn 5G Summit  April 24-27, 2018
  - Board meeting on April 24 (Tuesday)
  - All affiliates invited
  - Bigger space for demos, talks, ...