

## Wireless Research at Illinois

- " Arguably the most prominent wireless communications/networking team in academia
- " 35+ faculty in College of Engineering
- " 100+ graduate students and postdocs
- " Research sponsored by various federal funding agencies (NSF, DARPA, ONR, etc.), and companies (Boeing, Motorola, Rockwell-Collins, Vodafone, etc.)

## Motivation and Plans

- Consolidate wireless-related research activities at UIUC
- Support systems projects investigating end-to-end solutions, in addition to narrowly focused projects
- Focal point for industry-university interactions in wireless communications/networking
  - research, collaborations, student recruiting, continuing education
- Support educational activities
  - undergraduate research
  - wireless-related courses
- Funding models
  - industry: gifts, fellowships, funded research, collaborative projects
  - government: Center-scale grants (e.g., ERC, IGERT, REU), and Multi-investigator projects (e.g., MURI, DARPA)

### Antennas/Circuits/Architecture

- \* Sarita V. Adve
- \* Jennifer Bernhard
- \* Deming Chen
- \* Yun Chiu
- \* Milton Feng
- \* Ada Poon
- \* Elyse Rosenbaum
- \* Naresh Shanbhag

### Communication Systems

- \* Richard Blahut
- \* Todd Coleman
- \* Minh Do
- \* Douglas Jones
- \* Olgica Milenkovic
- \* Pierre Moulin
- \* Ada Poon
- \* Dilip Sarwate
- \* Andrew Singer
- \* Venu Veeravalli
- \* Pramod Viswanath

### Network Algorithms

- \* Tamer Basar
- \* Chris Hadjicostis
- \* Bruce Hajek
- \* Jennifer Hou
- \* P. R. Kumar
- \* Sean Meyn
- \* R. Srikant
- \* Venu Veeravalli

### Network Protocols

- \* Tarek Abdelzaher
- \* Intranil Gupta
- \* Jennifer Hou
- \* Robin Kravets
- \* Haiyun Luo
- \* Klara Nahrstedt
- \* C. Polychronopoulos
- \* Nitin Vaidya
- \* Benjamin Wah

### Security

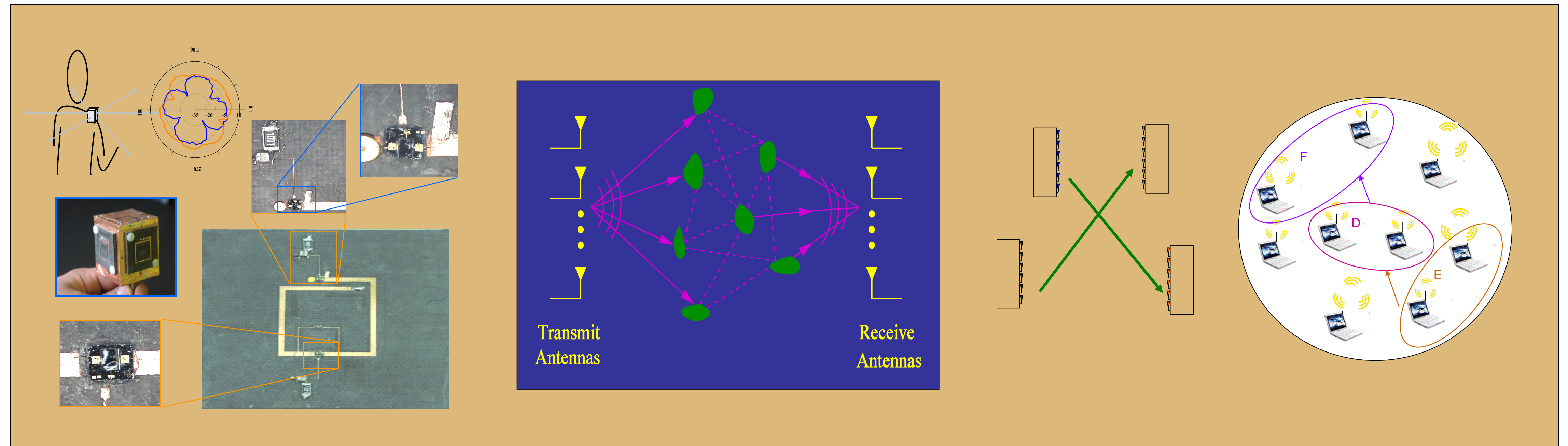
- \* Tamer Basar
- \* Richard Blahut
- \* Roy Campbell
- \* Carl Gunter
- \* Chris Hadjicostis
- \* Yih-chun Hu
- \* Ravishankar K Iyer
- \* William H. Sanders
- \* Nitin H. Vaidya

### Performance Modeling/Simulations

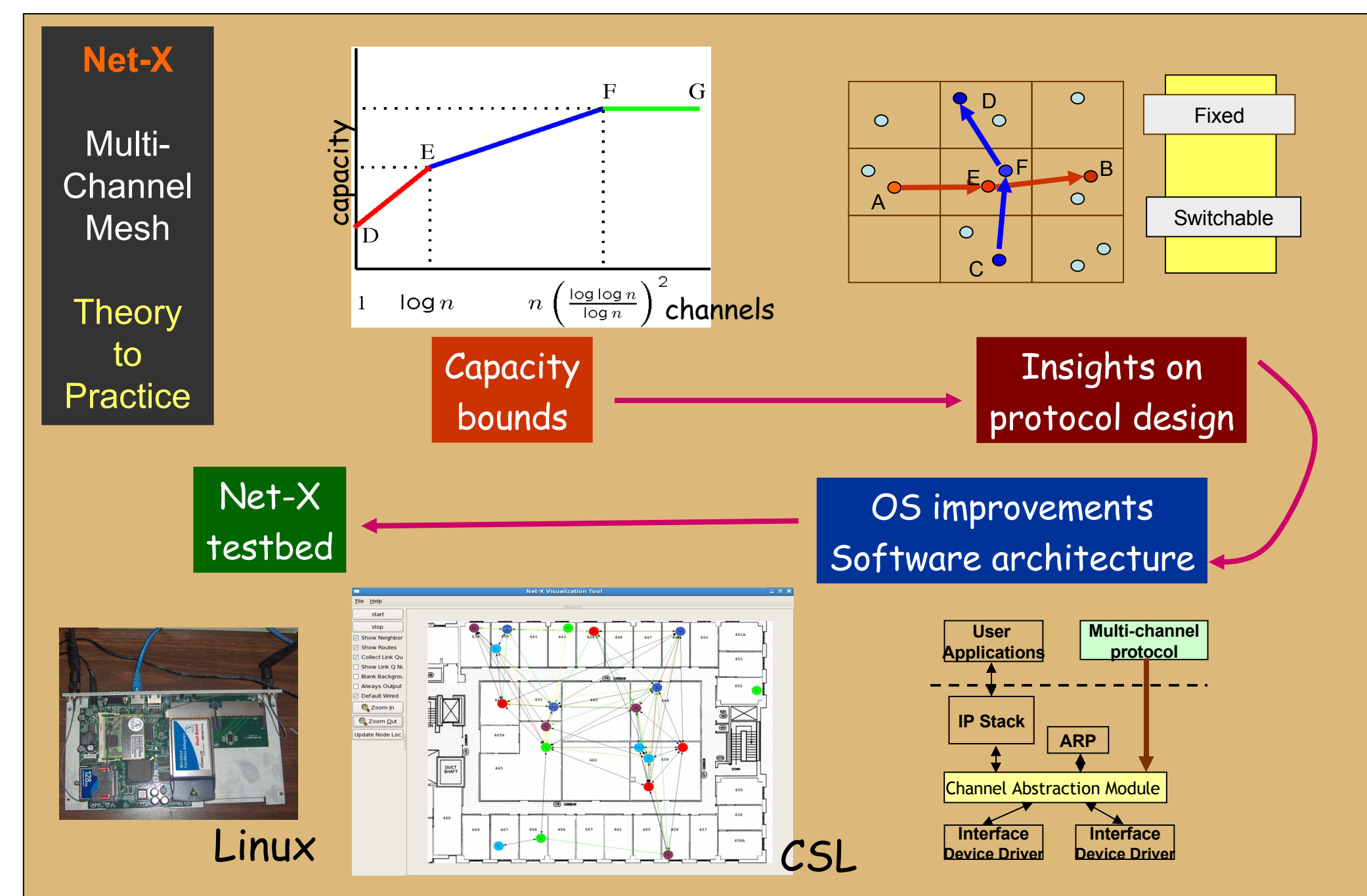
- \* Jennifer Hou
- \* Ravi Iyer
- \* David Nicol
- \* William H. Sanders

### Applications/Middleware

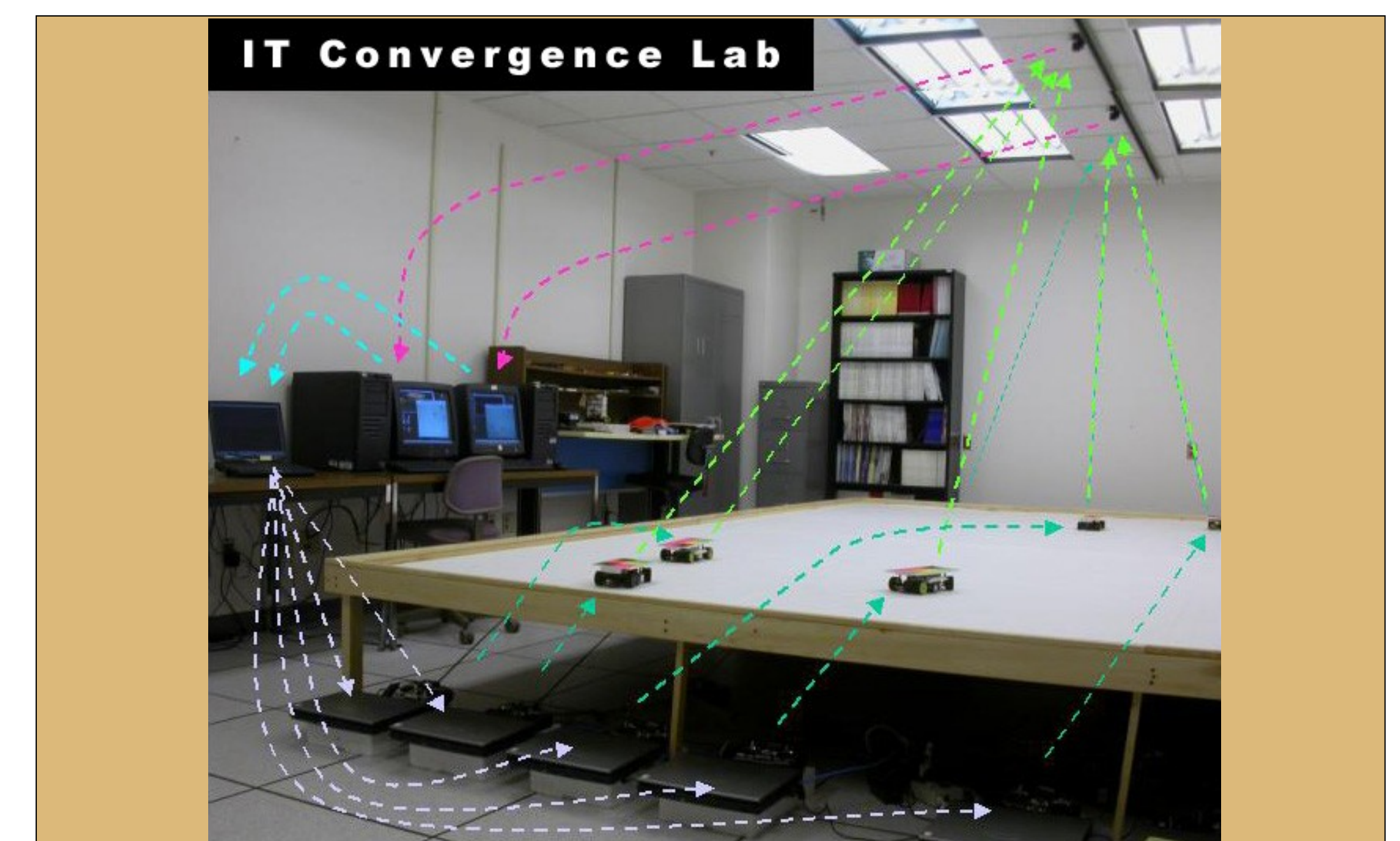
- \* Gul Agha
- \* Intranil Gupta
- \* Klara Nahrstedt



Networked MIMO: A Systems Approach - Antennas to Protocols



Net-X: Theory to Practice



Convergence of Communications, Computing and Control