WARP:
Wireless Open-Access Research Platform

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Welcome!

- 10th WARP Workshop
  (6th @ Rice, 4 International)

- 11 Visitors
- 5 Rice participants
Introductions

• Rice Instructors
  – Melissa Duarte
  – Sid Gupta
  – Patrick Murphy
  – Chris Hunter

• Participants
  – Name
  – Institution, Advisor
  – Research Focus
Workshop Goals

• Introduce you to all the tools and design flows

• Expose to important issues, not all
  – Expertise requires experience

• Ask a lot of questions
  – Instructors are creators of WARP

• Do all labs (even if not in your area)
  – Great programmers know hardware
  – Great computer architects know their applications
Post-Workshop

• More questions?
  – WARP Repository Documentation
  – WARP Forums

• Contribute, this is an open-source effort
  – Participate in discussions online, help with knowledge base
  – Contribute code to increase codebase
  – Post data from experiments
  – Share methodology to conduct experiments more efficiently
Agenda – Day 1

- Presentation: Introduction to WARPLab (Melissa)
- Lab 1: WARPLab
- Lunch
- Presentation: Introduction to Xilinx Platform Studio (Sid)
- Lab 2: Using XPS & WARP User I/O
- Presentation: Physical Layer Design on WARP (Patrick)
- Lab 3: Building a Simple Transceiver
Agenda – Day 2

• Presentation: Introduction to MAC Design on WARP (Chris)
• Lab 4: NoMAC
• Lab 5: HalfMAC – Software
• Lunch
• Presentation: Advanced MAC Design – A Case Study (Chris)
• Lab 6: HalfMAC – Hardware
• Demo: OFDMA System on WARP (UCI)