Core Problems Identified

- **Send-Receive Problem**
  - A receiver node must not proceed past the point at which it should receive a radio packet until the sender is beyond the point.
  - Time to send a byte on mica2: 610

- **Sampling Problem**
  - A node sampling the RSSI value of a packet should not proceed past a point in the timeline that possible senders can influence the sample.
  - Time to sample RSSI on mica2: 83

Parallel, cycle-accurate simulation

**Results**

- **Cycle-accurate AVR sim**
  - Efficient execution of programs without loss of precision, and possible senders can influence the sampled value

- **Device and Radio simulation**
  - Timers, UART, SBI, CC1000