## ECE G 364 Wireless and Mobile Networking Spring 2004

## Homework 1: Due in class Monday January 26 2004

- This test contains 4 questions about a research paper. They allow you to earn 100 points.
- Show your work, as partial credit can be given. You will be graded not only on the correctness of your answer, but also on the clarity with which you express it. **Be neat**.
- No late submissions will be accepted.
- Only homework returned in a  $9in \times 12in$  envelope will be accepted. (If you cannot find such envelope, ask the Instructor.) Please, write your name and the class name (ECE G205) on the envelope (write clearly, please).

Write your name here:

- The following question refers to the paper [1] which has been distributed either in class or via e-mail (ask the instructor for a copy of it in case you haven't received it).
  - 1. Write at most a page that summarize the paper. In particular, describe what is the main contribution of this paper, and why it introduces something that is innovative.
  - 2. Which kind of multiple access is provided by TSMA protocol?
  - 3. What are the strengths and the weaknesses of the paper, i.e., the strengths and weaknesses of the TSMA method?
  - 4. Compare TSMA to simple TDMA. When is it that it is more convenient to use the first or the latter?

## References

[1] I. Chlamtac and A. Faragó. Making transmission schedules immune to topology changes in multi-hop packet radio networks. *IEEE/ACM Transactions on Networking*, 2(1):23–29, February 1994.