Presentation Requirements

Each student will present a paper to the class and prepare an associated class exercise. These presentations are the most important activities of the course. This handout explains requirements for the presentations.

Purpose

The presentation has three purposes: First, it motivates you to understand at least one technical paper thoroughly. Second, your presentation will help other students learn the paper. Third, the presentation gives you an opportunity to improve your oral communication skills.

Requirements

The presentation involves the following five tasks:

1. *Paper selection.* In consultation with the instructor, you must select one significant technical research paper to present. It is important to select a paper that fascinates you so that you will have the motivation to understand it thoroughly. You should select a paper that has made or will like make a significant impact on cryptologic research.

   It is your responsibility to make copies of the paper for the rest of the class (for this purpose, you may use the CMSC copy machine).

2. *Oral presentation.* Using one class period, present the paper. The format of the presentation is your choice; I recommend using overhead transparencies. Do not try to present every detail of the paper. Instead, clearly convey the main results; identify the novelty of the work; and explain its significance. Illustrate the main results and technical methods by discussing selected details—for instance, go over in detail an instructive example or special case. In addition to explaining the technical results, it is important to convey how and why the author achieved the result.

3. *Exercise and model solution.* Prepare one written exercise for the other students in the class. The exercise should require understanding of an important aspect of the paper. For example, the exercise might be to work out an example or special case, generalize a result, or fill in details of a proof. You will also prepare a model solution. After checking your exercise and model solution with the instructor, you will distribute your exercise to the other students. You will read and evaluate their solutions. The exercise should be solvable by other students within approximately ten hours of effort after reading the paper.

4. *Open research question.* Clearly identify at least one significant unsolved research question associated with your paper. This question can be one stated by the author of the paper, or it can be one of your own creation. In writing, state this question, explain why it is important, and briefly review any prior work related to solving this question. In addition, you are encouraged to speculate how one might go about solving this question.

5. *Supplemental materials.* Please feel to help other students understand your paper by supplementing your presentation with additional materials. For example, you may want to pass out relevant companion papers, digrams, outlines, background material, explanations, or news reports. You may want to show a video. Be creative.