Class Project Information

The project can be (i) an in-depth study of key papers in an area not covered in class, (ii) a solution to an open problem, or (iii) a new problem with some preliminary results. The project needs to be in the general area of network information theory.

- **Grouping**: Projects can be done in groups of 1 to 2 students. A list of recommended projects is provided below. You can propose your own project.

- **Presentation**: Each group will be given 25 minutes to present their project in the last week of the class (the week of March 10).

- **Final report**: Each group should submit a hard copy and an electronic copy of their project report by **4pm on Thursday, March 20**. The projects should be submitted in the IEEE two column format, which we will provide you with. Project reports should not exceed 4 pages (including references).

- **Recommended project topics**:

  1. **Open problem 17.3. Symmetric capacity of the binary multiplier channel**


  2. **Open problem 19.1. Symmetric capacity of the Gaussian two-way relay channel**


3. Noisy broadcast


4. Improvement on the cutset bound


5. Structured codes in Gaussian networks


