TLT-5200/5206 Communication Theory, Matlab Exercises #2 - #3

COMMUNICATION SYSTEMS II ELE 045

Laboratory Manual

Matlab Exercises 2 and 3 can be found at the course website as a pdf-file, and the paper version can be got for copying purposes (short loan) from room TG209. From those we will go through experiments #1 and #2. These experiments have a group of Matlab functions (m-files) that are made specifically for these experiments. They are not included in the normal Matlab toolboxes, but can be found from the course website. Before starting, you should put the m-files to the search path:

The m-files are available at network drive (\\hemi.students.tut.fi\GroupHomes\\TST\TLT-5200\\matlab\) and are accessible from TC221. This is the directory you should put to the Matlab path:

 $File -> Set \ Path -> Add \ Folder -> \underline{\ \ \ } -> OK$

The m-files are available also at (http://www.cs.tut.fi/kurssit/TLT-5200/mharjoitus_tehtavat/tlt2.zip) for home etc. use.

It is advisable not to save the path for future use, because this path setting would be active also in other computers of the computer centre! However, in this case, you need do the set path separately for exercise 2 and 3.

Now you can open your own M-file and write the commands there or you can type these commands directly to the Matlab command prompt.

Before starting the actual experiments, type the following command to turn off some unnecessary warnings about capital letters:

>> warning('off','MATLAB:dispatcher:InexactMatch')

Then start the experiments by command 'start' and then enter the experiment number:

- >> start % this creates certain global variables for these experiments to the Workspace memory.
- In <u>Matlab Exercise 2</u>, we'll do Experiment 1 parts A through C, those start on page 15 and end on page 21 at part Q1.5.
- In <u>Matlab Exercise 3</u>, we'll do Experiment 2 parts A − E, which starts on page 29 and ends on page 35.