Small Project 1, Comments

Here is an example of a nearly-ideal plot of data from small-project 1. The data is contained in a file called dat.txt. The file has 9 columns. The first is the capacity of the BSC, and the other 8 correspond to the capacities of meta-channels with varying k.

The following is a transcript of the matlab session in which the data was plotted. Below that, you should see an image of the plot.

```
load dat.txt
clf
for i = 2:9,
  loglog(dat(:,1),dat(:,i));
  hold on;
  p(i-1) = loglog(dat(:,1),dat(:,i),syms{i-1});
end
grid on
legend(p,{'k=2','k=3','k=5','k=8','k=10','k=20','k=40','k=80'})
xlabel('capacity of BSC');
ylabel('capacity of meta-channel');
title('n = 10,000');
```
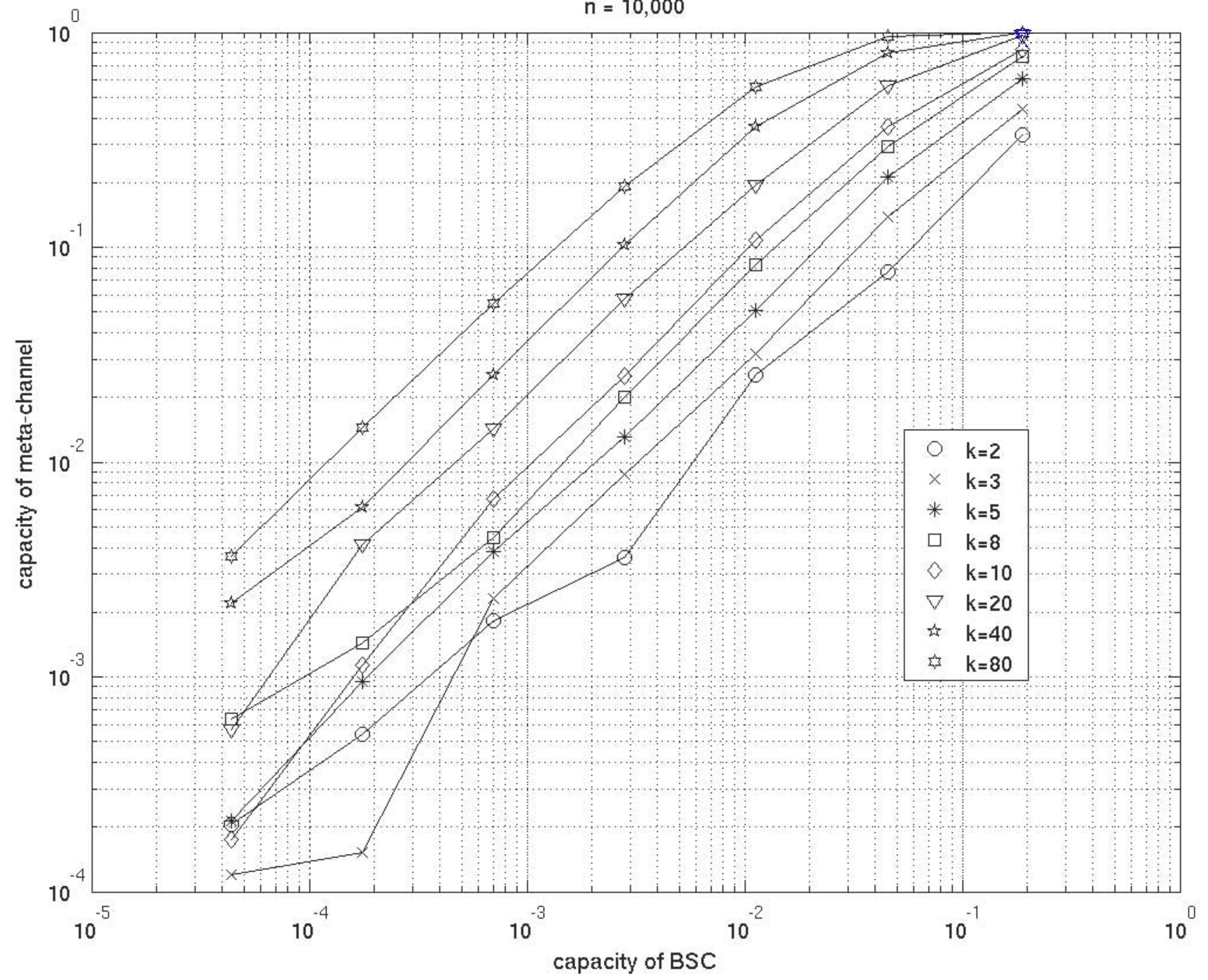
To get the legend in the right place, I dragged it. Yes, you can drag the legend with the mouse in Matlab graphics!

You will note that some of the lines cross in this image. That is because the data is for 10,000 runs. If you take around 1 million runs, then each "curve" becomes very close to a straight line on the left-hand side.