4.2 Mutual impedance

Matlab program

The program computes real and imaginary part of the mutual impedance of antennas depending on the length of the dipole l, on the shift between the centers of the dipoles h and on the distance of the dipole axes d. Parameters are entered to the program multiplied by the wave-number, i.e. as kl, kh and kd.

First the path of Matlab has to be redirected to the folder **Impedance**. The program is run calling the m-file `vzimp.m`. Leaving the introductory window, which brings the basic information about the program and which serves for the selection of a chart to be displayed (which variable is going to vary), values of kl, kh and kd have to be entered. The type of entered parameters depends on the setting in the introductory window (which chart is going to be displayed and which variable is going to vary). For the varying variable, its minimum value and its maximum one have to be given. Pushing the button $\boxed{\text{Compute}}$ (if one of values is swept), a new window is opened, where the course of the real part and the imaginary one of the mutual impedance is depicted with respect to the selected varying parameter.

The button $\boxed{\text{Exit}}$ serves for finishing the program and the button $\boxed{\text{Back}}$ can be used for a new run of the program.