4.1 Wire dipole

Matlab program

The computer program, accompanying the paper about the moment analysis of a wire dipole is available here. The program is of very simple user's interface. We run Matlab and set the path to the folder **Dipol**. In the command window, the basic m-file `dipol.m` has to be run and the appearing form has to be filled in. In the form, we type the length of the dipole (related to wavelength) and the radius of the dipole (related to wavelength). The program prints input impedance of the dipole. In two independent windows, current distribution on the antenna and directivity pattern are plotted.

The program considers the fixed number of discretization segments (`N` = 33). The excitation gap is assumed in the middle of the wire.