**Brief introduction to the use of the Matlab Scripts to compute S2(r)**

There are two main scripts that compute S2(r). One of the series of script is written for 2-D images, the second for 3-D images. We also provide an example of each types of input files as a test and example for users. The main scripts have window prompts that guide the users through an optimal use of the scripts.

**2-D calculations:**

The main script to run the calculations from is main2D.m and it uses get\_autocorr.m to compute the two-point correlation from Fourier Transforms. The input file we provide for 2D is irregular\_m.dat. The prompt asks for the stopping distance of choice and the resolution (spatial) of the image.

**3-D calculations:**

The main script to get S2(r) for 3-D shapes assumes that the 3-D image is constructed as a series of 2-D slices and it is called Main\_cleaned.m

It uses autocorr\_3D.m to compute the two-point correlation using again Fourier Transforms (in 3D). The series of input files (stack of 2-D images in tif format) are called here St-3XXXX.tif. The prompt asks for the name of the series of input files, their number and the spatial resolution of the images.