

In the config.ini are the following sections: [MAIN], [ACCELEROMETER], [GYROSCOPE] and [GRAPH].

The MAIN section is for the configuration of the general constants. The following values can be specified:

Key	Description	Default value
<i>max_processes</i>	The maximum number of processes that can be used.	Number of processors on the PC.
<i>filenames</i>	The path where the files are stored. Ignored if <i>filenames_auto</i> is true.	
<i>filenames_auto</i>	Whether the file names should be generated automatically. If true names and measurements must be given.	<i>true</i>
<i>m</i>	Mass of the spheres in kg.	0.01496kg
<i>measurements</i>	What series of measurements has been performed. Separated by a comma. Ignores if <i>filenames_auto</i> is false.	
<i>multi_processing</i>	Whether multiprocessing should be applied.	<i>auto</i>
<i>names</i>	Name of the probes used. Separated by a comma. Ignores if <i>filenames_auto</i> is false.	
<i>r</i>	Radius of the spheres in m.	0.02925m
<i>save_formatter</i>	In which format the output should be saved.	1.2e
<i>save_output</i>	Whether to create a file with the calculated energies. Currently it should be set to false for more than one file	<i>false</i>

The ACCELEROMETER section for the configuration of the constant of the processing of the acceleration:

Key	Description	Default value
<i>degree_of_spline</i>	Degree of the smoothing spline or points for averaging in both directions. Must be an integer.	50
<i>error</i>	Value for error smoothing.	0.001
<i>g_interfered</i>	Whether the measurement took place under the influence of gravity	<i>true</i>
<i>in_g</i>	Whether the measurement results are given in factors of g.	<i>true</i>
<i>integration_mode</i>	Which integration mode to use.	<i>a</i>
<i>sensorpos</i>	Where the sensor position is in relation to the center point	1.2, 7.4, 4.5
<i>smoothes</i>	Positive smoothing factor.	0.8
<i>start_velocity</i>	The starting speed of the sensors.	0, 0, 0
<i>trajectory</i>	Whether to generate the trajectory.	<i>false</i>

The GYROSCOPE section for the configuration of the constant of the processing of the rotation speed:

Key	Description	Default value
<i>degree_of_spline</i>	Degree of the smoothing spline or points for averaging in both directions. Must be an integer.	5
<i>error</i>	Value for error smoothing	0.001
<i>in_grad</i>	Whether the measurement results are given in degrees.	<i>true</i>
<i>integration_mode</i>	Which integration mode to use.	<i>s</i>
<i>smoothes</i>	Positive smoothing factor.	0.8
<i>start_rotation</i>	The starting rotation of the sensors.	0,0,0

The GRAPH section is for customizing the display properties of the created graphs:

Key	Description	Default value
<i>do_graph</i>	Whether graphs should be created.	<i>true</i>
<i>formatter</i>	How many digits are displayed on the xy(z)-axis.	<i>1.2e</i>
<i>save_graph</i>	Whether to save the graphs.	<i>false</i>

The following options can be selected for *integration\_mode*.

Key	Description
<i>a</i>	Average with $\pm$ <i>degree_of_spline</i> values.
<i>i</i>	Simple interpolation.
<i>s</i>	1-D smoothing spline fit.