

In the config.ini there 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 |
|-----------------------|---|
| <i>names</i> | Name of the probes used. Separated by a comma. Ignores if filenames_auto is false. |
| <i>filenames</i> | The path where the files are stored. Ignored if filenames_auto is true. |
| <i>measurements</i> | What series of measurements has been performed. Separated by a comma. Ignores if filenames_auto is false. |
| <i>m</i> | Mass of the spheres in kg. The default value is: 0.01496. |
| <i>r</i> | Radius of the spheres in m. The default value is: 0.02925. |
| <i>filenames_auto</i> | Whether the file names should be generated automatically. If true names and measurements must be given. The default value is: True. |
| <i>do_output</i> | Whether to create a file with the calculated energies. Currently it should be set to false for more than one file. The default value is: False. |

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

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

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

| Key | Description |
|-------------------------|---|
| <i>error</i> | Value for error smoothing. The default value is: 0.01. |
| <i>in_grad</i> | Whether the measurement results are given in degrees. The default value is: <i>true</i> . |
| <i>integration_mode</i> | Which integration mode to use. The default value is: <i>s</i> . |
| <i>degree_of_spline</i> | Degree of the smoothing spline or points for averaging in both directions. The default value is: 5. Must be an integer. |
| <i>smoothes</i> | Positive smoothing factor. The default value is: 0.8. |
| <i>start_rotation</i> | The starting rotation of the sensors. The default value is: 0, 0, 0. |

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

| Key | Description |
|-----------|---|
| formatter | How many digits are displayed on the xy(z)-axis. The default is: $1.2e$. |

The following options can be selected for *integration_mode*.

| Key | Description |
|-----|--|
| i | Simple interpolation. |
| s | 1-D smoothing spline fit. |
| a | Average with value and $\pm k$ values. |