Soft version: *analyses MATLAB v1.0.1*

Manual version: *v0.1*

1. QPR_MAIN_data_process_p1_HZB/CERN

Input data

- ExperimentData

Output data

- ExperimentData
- alldata
- alldata0
- mode

Import of the measured data to [ExperimentData], creation of the [alldata] and [alldata0] archives, which conration all data in one list.

----------Structure of the [**alldata**] database:----------

alldata(:,1:37) - string from the data file
alldata(:,38) - Run number from the file name (if no 'Run' in the name, then == 0)
alldata(:,39) - file number from the [**ExperimentData.QX**], from which the point is taken
----------end of struct----------

2. QPR_MAIN_data_process_p2_plots

Creates sorted Rs vs B and Rs vs T datasets

----------Structure of the [**RsvT**] database:----------

RsvT.QX(:).data - measured data
RsvT.QX(:).data(:,1) - mean Sensor temp
RsvT.QX(:).data(:,2) - 1 sigma Sensor temp
RsvT.QX(:).data(:,3) - Rs [nOhm]
RsvT.QX(:).data(:,4) - 1 sigma of Rs points
RsvT.QX(:).data(:,5) - Run Number, if 0 - Not spec
RsvT.QX(:).data(:,6) - CW (100) (or duty factor if CW sort=1)
RsvT.QX(:).data(:,7) - File number if File_sort=1, corr. to num. in ExperimentData
RsvT.QX(:).Bfield(:) - B field value (average) corr to the dataset
RsvT.QX(:).dataline(:) - full dataline from the .txt file of the firs point of averaged point set.
----------end of struct----------

----------Structure of the [**RsvB**] database:----------

RsvB.QX(:).data - measured data
  RsvB.QX(:).data(:,1) - mean B field [mT]
  RsvB.QX(:).data(:,2) - 1 sigma B field [mT]
  RsvB.QX(:).data(:,3) - Rs [nOhm]
  RsvB.QX(:).data(:,4) - 1 sigma of Rs points
  RsvB.QX(:).data(:,5) - Run Number, if 0 - Not spec
  RsvB.QX(:).data(:,6) - CW (100) (or duty factor if CW sort=1)
  RsvB.QX(:).data(:,7) - File number if File_sort=1, corr. to num. in ExperimentData
RsvB.QX(:).Temp - temperature value corr. to the dataset
RsvB.QX(:).dataline(:) - full dataline from the .txt file of the firs point of averaged point set.
----------end of struct----------