MLM-IV-ANALYSIS

MLM-IV-Theory Plots, generates the theoretical plot by Merlino 2007, and overlays experimental artifacts as leakage current for ions and electrons, and a capacitive rounding of the "knee". We use the functions (3) and (6) from the Merlino 2007 paper. Merlino RL has made a Maple program doing the same, this here is an easier accessible Python version using Plotly as plotting engine, all based on open-source code and libraries and without any cost of use.

Our use of the program is as a foundational algorithm used in our instrumentation where we have embedded the code for analysis of plasma generated in our devices. The program can be used as a standalone program and run from e.g. VSCODE, PYCHARM, Jupyter Notebook or even from command line Python terminals. (see notes under