

## **Master Thesis**

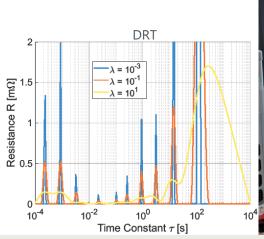


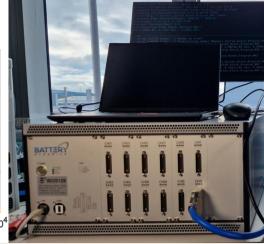
## Implementing a Bayesian Estimator for DRT Estimation

The Distribution of Relaxation Times (DRT) is an established and intuitive Methode to assess the underlying Process of Lithium-Ion Batterys. Yet, there are still challenges in estimation the DRT e.g. finding the best regularization parameter to solve this ill-posed problem. These challenges may be overcome by using a bayesian algorithm.

The aim of this Master Thesis is to implement and test an algorithm that uses Bayesian methods to extract the DRT out of time domain data. The topic and fundamentals will be explained to the student. In addition, the student will:

- Deepen his understanding on data processing and evaluation
- Enhance your proficiency in Python
- Gain hands-on experience with specialized software tools used in battery testing and evaluation





## Qualifications:

- Fundamental programming knowledge
- Independent and careful way of working

## Contact:

Marvin Malchau, M.Sc.

Tel.: 0921/55-4963

E-Mail: marvin.malchau@uni-bayreuth.de

BayBatt-Building, Raum 1.10 Weiherstraße 26, 95448 Bayreuth