

GSI and TU Darmstadt (SPG)

Optimal Parametric Estimation of Schottky Spectra



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- Estimation of schottky spectra based on parametric models with high precision and high resolution
- Extraction of important parameters, such as tune, chromaticity and momentum spread

Challenges

- ▶ Disturbances from the environment and the schottky PUs
- ▶ Signal deformation by space charge effects

Research

- ▶ Develop advanced robust signal processing tools for large dynamic range of parameters