

## STELAR Late Breakfast Tutorial

11<sup>th</sup> Fast field Cycling NMR relaxometry - Pisa

Wednesday 5<sup>TH</sup> JUNE - 09.00 - 10.30 am

### Fitting FFC relaxometry data with fitteia



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and

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#### AIM OF TUTORIAL

Fitting relaxometry data, including NMRD profiles from FFC is a problem which researchers have approached using different tools, both non-specific commercial software and self-developed software. To date there is no one commercial software program for specific use with FFC relaxometry data. **fitteia** is a possible solution which can be adopted and adapted specifically for FFC relaxometry data. **fitteia** is an open online model fitting platform, developed by Pedro Sebastião, with many years of experience in fitting relaxometry data, that does not require the installation of local software or the purchase of a software license and, in addition, that can be accessed from any operating system.

This tutorial, in collaboration with Stelar, aims to show FFC relaxometry researchers how **fitteia** can be used to their advantage, with examples of relaxation model fits to actual experimental results (case studies and recent publications). **fitteia** includes a library of relaxation models for molecular rotations, translational self-diffusion, RMTD, cross-relaxation, order director fluctuations in nematic and smectic LC phases, Rouse model, paramagnetic relaxation, etc. This library can be easily extended.

The tutorial will be followed by a case-study/practical demonstration fitting with **fitteia** on data acquired with a Stelar FFC relaxometer.

<http://fitteia.org/>

*P.J. Sebastião, "The art of model fitting to experimental results", Eur. J. Phys. 35, 15017 (2014)"*