ChiSurf – Interactive data analysis

ChiSurf is a software package for the analysis of complex fluorescence data acquired in time-resolved single-molecule and ensemble fluorescence experiments. The main feature of ChiSurf is the joint (global) analysis of multiple datasets.

tttrlib- Time Tagged Time Resolved Library

tttrlib is a file format agnostic low level, high performance library to read and process timetagged-time resolved (TTTR) data acquired by PicoQuant (PQ) and Becker & Hickl measurement devices/cards or TTTR files in the open Photon-HDF format.

The library tttrlib facilitates the work with files containing time-tagged time resolved photon streams by providing a vendor independent C++ application programming interface (API) for TTTR files that is wrapped by SWIG (Simplified Wrapper and Interface Generator) for common scripting languages as Python as target languages and non-scripting languages such as C# and Java including Octave, Sailab and R. Currently, tttrlib is wrapped for the use in Python.

FLIMsee

FLIMsee is a (flimsy) web-app building on tttrlib to convert fluorescence lifetime image data into standard images for processing of microscopy data.

BFF – Bayesian Fluorescence Framework

Bayesian Fluorescence Framework (BFF) is part of the open-source *Integrative Modeling Platform* (IMP) software environment and facilitates the development of modelling protocols based in part on fluorescence data. BFF improves the accuracy, precision, and completeness of the resulting models by formulating the modelling problem as a sampling problem dependent on general and flexible libraries of (*i*) atomic and coarse-grained molecular representations of single-state models, multi-state models, and dynamic processes, (*ii*) Bayesian data likelihoods and priors, as well as (*iii*) sampling schemes.

<u>QuEst – Quenching Estimator</u>

Quenching Estimator is a software to simulate the diffusion of a tethered dye on a macromolecular surface to simulate time-resolved fluorescence decays and estimate the degree of dynamic quenching of the dye by its local environment.

<u>Downloads</u>