

~~TOC~~

## FLIM

### What is "FLIM"

FLIM stands for **F**luorescence **L**ifetime **I**Maging or **F**luorescence **L**ifetime **M**icroscopy. ([🌐 Fluorescence-lifetime imaging microscopy](#)).

In FLIM additional image contrast that is gained by evaluating information on fluorophore decay dynamics for each image pixel. Usually a false color plot is used to visualize the average [fluorescence lifetime](#) in each pixel of the image.

### FLIM on this wiki

- [Fast FLIM](#)
- [FLIM](#)
- [FLIM Measurement Using a Nikon A1 with a FLIM and FCS Upgrade](#)
- [FLIM Measurement Using a Zeiss LSM710/LSM780/LSM880 with a FLIM and FCS Upgrade](#)
- [FLIM Measurements Using an Olympus FV3000 with a PicoQuant FLIM Upgrade](#)
- [FLIM-FRET Calculation for Multi Exponential Donors](#)
- [FLIM-FRET Calculation for Single Exponential Donors](#)
- [FLIM-FRET Measurement Using an Olympus FV1200 with a FLIM and FCS Upgrade](#)
- [How to Avoid the Pile-up Effect in FLIM Measurements](#)
- [Interfacing a time-resolved spectrometer \(FluoTime 300\) with a microscope \(MicroTime 100\)](#)
- [Lifetime Fitting Using the FLIM Analysis](#)
- [Lifetime-Fitting Using the FLIM Analysis \(updated for SymPhoTime V 2.5 and above\)](#)
- [Lifetime-Fitting Using the Rapid Reconvolution Model](#)
- [Nikon AX: NIS-Elements FLIM Examples](#)
- [Nikon AX: Phasor-Based Structural Separation Using FLIM](#)
- [Pattern Matching](#)
- [Phasor Analysis](#)
- [Recording a Fluorescence Lifetime Image \(FLIM\) Stack with a LSM Upgrade Kit on a Nikon A1](#)
- [ROI Fitting Using the FLIM Analysis](#)
- [ROI Fitting Using the FLIM Analysis \(updated for SymPhoTime v2.5\)](#)
- [Visualizing Dynamics Using the Multi Frame FLIM Analysis](#)
- [Visualizing Dynamics Using the Multi Frame FLIM Analysis \(updated for SymPhoTime v2.5 and above\)](#)

Copyright of this document belongs to PicoQuant GmbH. No parts of it may be reproduced, translated or transferred to third parties without written permission of PicoQuant GmbH. All information given here is reliable to our best knowledge. However, no responsibility is assumed for possible inaccuracies or omissions. Specifications and external appearances are subject to change without notice.



PicoQuant GmbH  
Rudower Chaussee 29 (IGZ)  
12489 Berlin  
Germany

P +49-(0)30-1208820-89  
F +49-(0)30-1208820-90  
info@picoquant.com  
www.picoquant.com