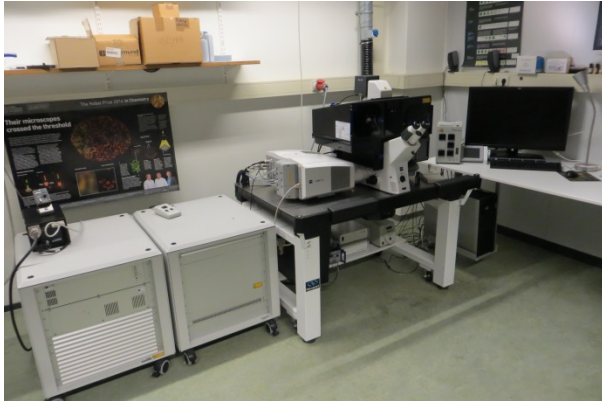


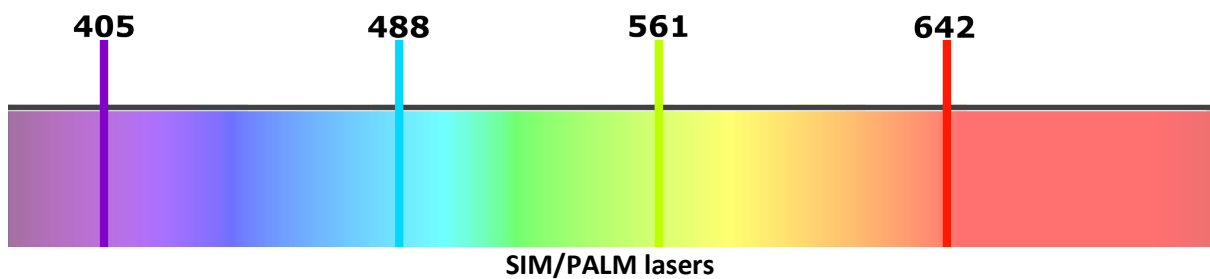
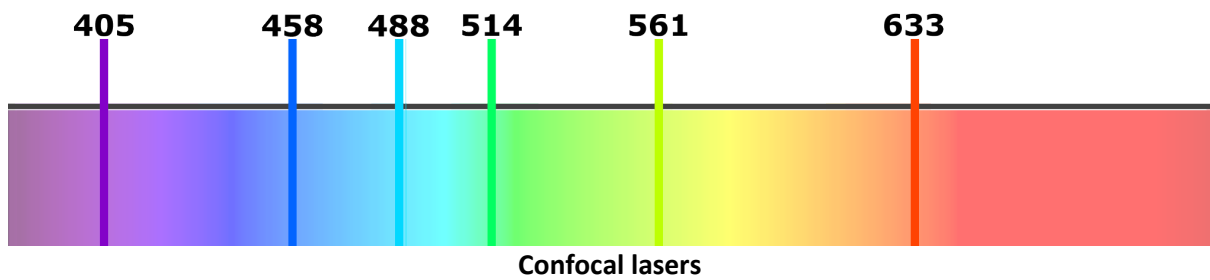
# Zeiss Elyra PS1

Be-311

*Zeiss Elyra PS1 SIM, PALM modules and LSM 780 confocal*



## Lasers



## Objectives

Magnification	Numerical Aperture	Working Distance (mm)	Immersion	Type
10x	0.3		dry	PL NeoFluar
63x	1.4		oil	Plan Aplanachromat DIC
100x	1.49		oil	α Plan Aplanachromat DIC
100x	1.57		oil	Korr α Plan Aplanachromat
Calibration objective				

## Detectors

Confocal:

32 channel GaAsP (spectral range 412nm – 691nm) (Gallium Arsenide Phosphide detector)  
Blue PMT (spectral range 371nm – 740nm) (Photo Multiplier Tube)  
Red PMT (spectral range 379nm – 758nm) (Photo Multiplier Tube)

**SIM:**

EMCCD camera Andor iXon DU 885, 1002x1004 pixels

**Single Molecule imaging:**

EMCCD camera Andor iXon DU 897, 512x512pixels

## Filters SIM/PALM

Fset 77 HE (3 colour triple filter green, red, far red) only filter for visual inspection

BP 420-480 + LP 750, blue dyes

BP 495-575 + LP 750, green dyes

BP 570-650 + LP 750, red dyes

LP 655 , far red dyes

## Lasers

### Confocal

405 nm - 30mW

458 nm, 488 nm, 514 nm - Argon

561 nm - 10mW

633 nm - HeNe

### SIM/PALM

405 nm - 50mW

488 nm - 100mW

561 nm - 100mW

642 nm - 100mW

## Extra info

Mercury lamp for EPI fluorescence

Piezo stage

Tokai Hit incubator for CO<sub>2</sub> and 37°C conditions with inserts for slides and 35mm dishes

Zeiss Zen blue SIM reconstruction module

Zeiss Zen blue Single molecule analysis module

## Applications

Structured Illumination Microscopy (SIM)

Stochastic Optical Reconstruction Microscopy (STORM)

Photo Activation Localization Microscopy (PALM)

Single molecule localization microscopy (SMLM)

Live cell confocal imaging under CO<sub>2</sub> and 37°C conditions

FRAP, FRET, Time lapse imaging

Fixed cell imaging