

# GraspJ - GPU-Run Analysis for STORM and PALM in ImageJ

## AFIB - ICFO

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## 1 Introducing GraspJ

## 2 GraspJ Views

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# Introducing GraspJ

# Dependencies & Modes

## Dependencies

- *Java Virtual Machine (JVM)*: needs at least Version 7.
- *OpenCL*: Open Computing Language, allows the possibility to compute in GPUs. Needs compiler and Drivers.

## Modes

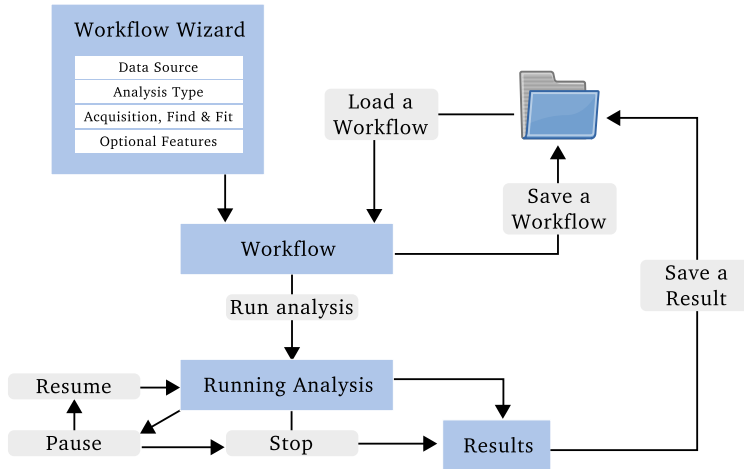
- *Standalone Mode*: Runs indepently from ImageJ/FIJI. Less realtime features. Easier to run.
- *Plugin Mode*: Runs inside ImageJ/FIJI. More realtime features. JVM versions issues.



OpenCL



## Common use



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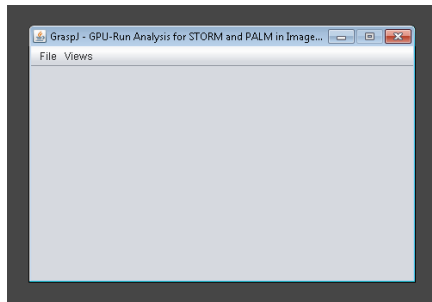


Figura:



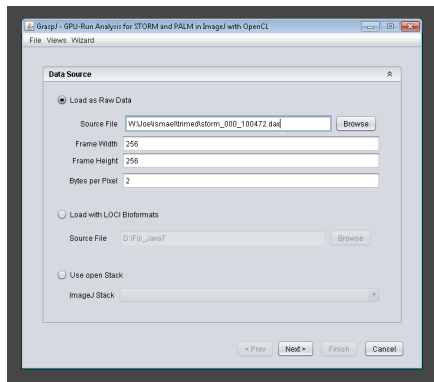


Figura:

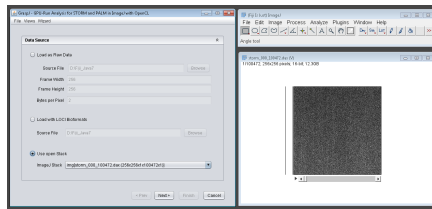


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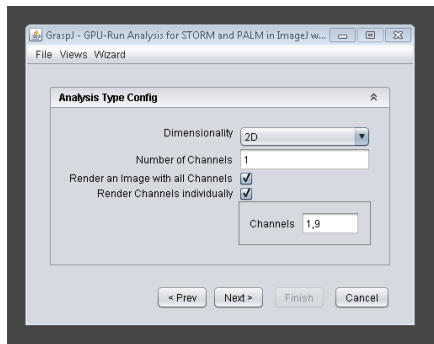
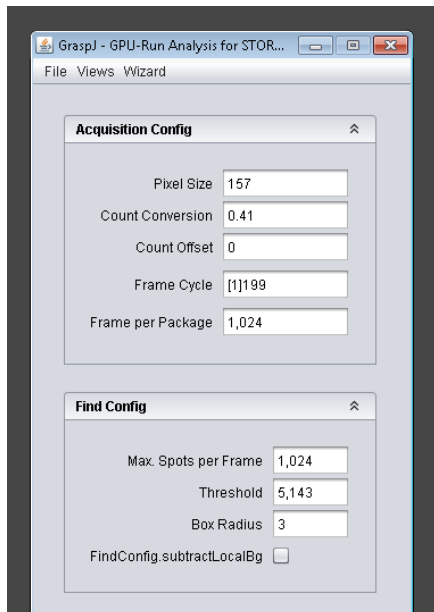


Figura:



The screenshot shows a software window titled "GraspJ - GPU-Run Analysis for STOR...". The window has a menu bar with "File", "Views", and "Wizard". Below the menu bar, there are two expandable configuration panels. The first panel, "Acquisition Config", contains five input fields: "Pixel Size" (157), "Count Conversion" (0.41), "Count Offset" (0), "Frame Cycle" ([1]199), and "Frame per Package" (1,024). The second panel, "Find Config", contains four input fields: "Max. Spots per Frame" (1,024), "Threshold" (5,143), "Box Radius" (3), and a checkbox for "FindConfig.subtractLocalBg" which is currently unchecked. The window is set to the "Views" tab.

GraspJ - GPU-Run Analysis for STOR...

File Views Wizard

**Acquisition Config**

Pixel Size 157

Count Conversion 0.41

Count Offset 0

Frame Cycle [1]199

Frame per Package 1,024

**Find Config**

Max. Spots per Frame 1,024

Threshold 5,143

Box Radius 3

FindConfig.subtractLocalBg ☐

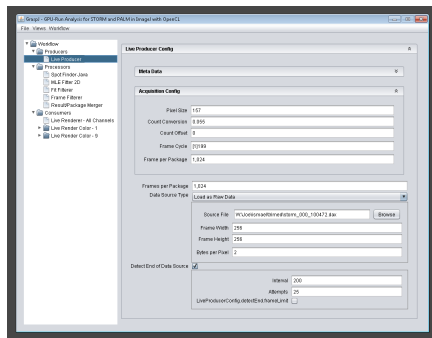


Figura:

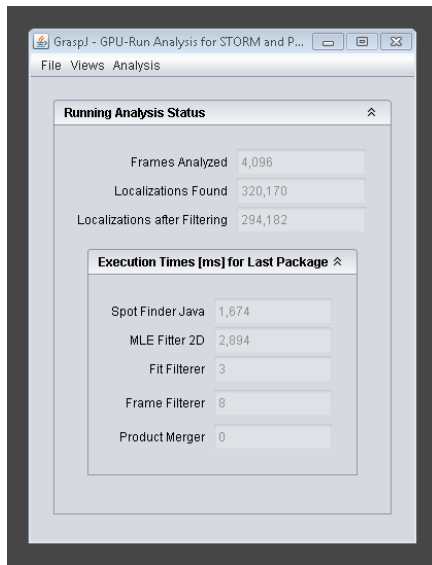


Figure:  
GraspJ

GraspJ - GPU-Run Analysis for STORM and PALM in ImageJ with ...

File Views Result

### Result

#### Meta Data

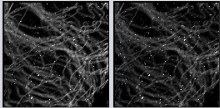
Name

Description

Date Created Fri Jul 10 12:49:00 CEST 2015

#### Summary

Channel 1 Channel 9



Number of Localizations 1,959,439

Localizations after Filtering 1,931,007

Average Localization Precision (3.1272204, 3.127144, 0.0)

#### Acquisition Config

#### Other

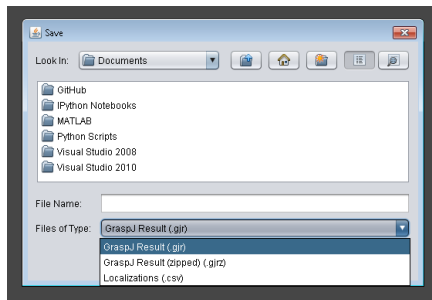


Figura:



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