NANOJ: HIGH-PERFORMANCE OPEN-SOURCE SUPER-RESOLUTION MICROSCOPY ANALYSIS IN IMAGEJ

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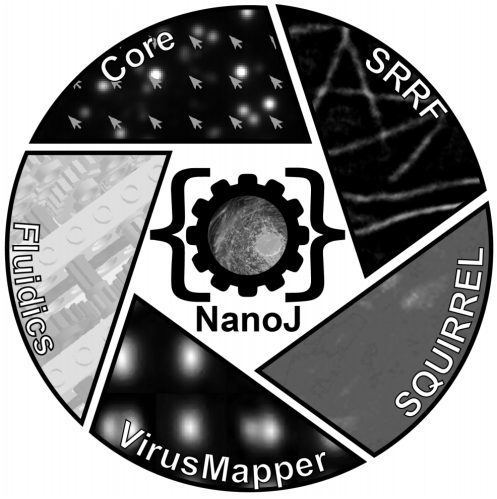
Super-resolution microscopy has become essential for the study of nanoscale biological processes. This type of imaging often requires the use of specialised image analysis tools to process a large volume of recorded data and extract quantitative information. In recent years, our team has built an open-source image analysis framework for super-resolution microscopy designed to combine high performance and ease of use. We named it NanoJ - a reference to the popular ImageJ software it was developed for. In this talk I will highlight the current capabilities of NanoJ[1] for several essential processing steps including super-resolution image reconstruction (NanoJ-SRRF)[2], image quality assessment (NanoJ-SQUIRREL)[3], structural modelling (NanoJ-VirusMapper)[4] and control of the sample environment (NanoJ-Fluidics)[5].



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