Gain and offset estimation software distribution

This software is distributed as accompanying software for the article *Calibrating photon counts from a single image* by R. Heintzmann, P.K. Relich, R.J.P. Nieuewenhuizen, K.A. Lidke, B. Rieger, Nature Photonics, 2016 submitted.

This distribution contains MATLAB software and an ImageJ plugin to run (part of) the algorithms described in the article. The MATLAB software is more extensive tested than the ImageJ plugin.

1   MATLAB

The provided scripts use Matlab (`http://www.mathworks.com`).The example code uses functions from the DIPimage Toolbox, you must install it before you are able to run the provided examples. DIPimage is a freely available image processing toolbox for MATLAB: `http://www.diplib.org` An installer for Windows is available, archives are available for Linux and Mac.

The top level function is: `pcfo` . The rest are helper functions called from this function. The function contains also an example in the help section to test it.

We hope that this example is instructive enough to allow the interested user to apply our code. If you have any troubles please to not hesitate to contact us at the email address given below.

2   ImageJ plugin

The ImageJ plugin is offering only basic functionality compared to the MATLAB functions. Just copy the plugin `Image_pcfo.class` into your local plugin folder and you are all set. The source code is also provided in `Image_pcfo.java`. The java function is a lot less tested than the Matlab function. It does also not give the same flexibility in terms of input options.

3   Terms of use

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