

## Reviewer Report

**Title: Imaging tissues and cells beyond the diffraction limit with structured illumination microscopy and Bayesian image reconstruction**

**Version: Original Submission**    **Date:** 8/16/2018

**Reviewer name: Guoan Zheng**

### Reviewer Comments to Author:

This manuscript provides the raw and analyzed data for structured illumination microscopy. The authors discuss different processing methods and provide the corresponding open-source codes. The SIM data and the processing codes are highly desired for the microscopy imaging community. In particular, the high quality raw data provided by this manuscript will help researchers to develop new methods for SIM. One minor point the authors may want to address is the difference between coherent interference illumination and the incoherent pattern illumination employed in the manuscript. It seems that interference illumination can generate a sin pattern with highest contrast at cutoff frequency while incoherent pattern illumination may suffer from the gradually cutoff of the incoherent OTF.

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