## **Electronic Supplementary Information**

## Non-invasive Raman spectroscopy for time-resolved in-line lipidomics

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## 1. Off-line single-cell lipidomics

Representative Raman spectra of each cluster within single yeast cells are depicted in figure S1. Solid line represents the mean spectrum, the standard deviation is shown as shaded area.



Figure S1. Representative Raman spectra (mean and single standard deviation) of each cluster within single yeast cells drawn at different time points (0.25, 2.25, 19.5, and 45.25 h). Spectra are color-coded according to the false color image of the yeast cell. Spectra are stacked such that the =C-H/CH ratio decreases from top to bottom. Scalebar is 5  $\mu$ m.