

# A Closer Look at Life: Computational Image Analysis

Fred Hamprecht

HCI, IWR, Universität Heidelberg

Biology has undergone a silent revolution: driven by microscopes that now achieve a resolution in space and time previously considered unattainable, and driven by lab automation (robots), biologists now routinely acquire images in the multi-terabyte range. These images are not an end in itself, but afford fundamentally new insights, e.g. in embryonal development or the wiring of our brains.

In this talk, I will invoke state of the art experimental results and show how machine learning techniques can be used to make sense of the deluge of recorded data.