

Why cells grow and divide? Fundamental biophysical growth mechanism.  
Fission yeast growth and reproduction

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Set of computed growth curves versus experimental data

for 32° C obtained by Baumgartner, S., Tolic-Norrelykke, I. M. in the study done at Max Planck Institute of Molecular Cell Biology and Genetics. Results were published in the article:

Baumgartner, S., Tolic-Norrelykke, I. M., 2009. Growth pattern of single fission yeast cells is bilinear and depends on temperature and DNA synthesis. *Biophys. J.* 96(10), 4336-4347.

In all graphs, ordinate axis is fission yeast length in  $\mu m$ , abscise axis is growth time in minutes. Label shows experimental dependence number; the word "stat" means that the growth curve was used for validation of the fission yeast model through variance.



























































