



**VABILO NA PREDAVANJE
V OKVIRU DOKTORSKEGA ŠTUDIJA
KEMIJSKE ZNANOSTI**

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z naslovom:

The biophysics of cellular growth laws

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Vljudno vabljeni!

Abstract

Cells obey growth laws, such as the one first studied by J Monod in the 1940's. A cell's growth rate increases with sugar concentration, up to a saturation rate. The principles that underly growth laws are not yet well understood; they are described in terms of evolutionary fitness landscapes. We are developing biophysical models for understanding what evolution is trying to optimize in simple cells such as bacteria and yeast. In many cases, the properties being optimized are physical, rather than biochemical or genetic.