

Diploma thesis abstract

A model describing the recently observed femtosecond oscillations in bacterial photoreaction centers at primary photosynthesis acts is presented. Model is based on Liouville equation and a system of integral-differential equations is obtained for closed multilevel system. Good agreement between model yield and experimental 150 femtosecond oscillations achieved. A set of numerical experiments for different regimes of electron transport was realized. Diploma also contains a comparison between different model approaches using to describe electron transport.