

# **J. Králík: The New Approaches to Teaching of Rudiments of Quantum Physics**

## **Abstract:**

This thesis is dealing with didactics of quantum theory and its modern trends. It contains a brief overview of problems in quantum physics education and many references to important sources in the field. Part of the thesis is focused on identification of some sources potential misunderstandings in the process of teaching and learning of quantum theory (misconceptions). The next part is devoted to a problem with visualization in microworld and after that I dealing with Feynman's approach to quantum theory, its advantages and disadvantages and I enumerate some pedagogical projects that continues in that direction. In another part I treat to my proposal for using quantum field theory terminology in introductory modern physics courses. The last chapter of the thesis is dealing with my project "The Road under Perception", which is intended as a teaching text about (modern) physics for non-experts. The thesis also contains appendix with excerpt of my article about history of microworld's origins cognition.