

Title: Solved Problems in Quantum Physics – angular momentum and spin

Author: Jaroslav Kafka

Department: Department of Physics Education

Supervisor: RNDr. Zdeňka Koupilová, Ph.D., Department of Physics Education

Abstract: The aim of this bachelor thesis was to create a set of solved problems in quantum physics for the electronic Collection of Solved Problems in Physics. Within this thesis 18 problems were created, which belong to the chapter Microworld Physics, mostly at the undergraduate level. There is described a brief history of the electronic collection and its technical background in the context of the user and the administrator. Part of the thesis includes description of the tasks in the matter of physical issues and its interconnection with other tasks of the Collection of Solved Problems in Physics. In the appendix there are presented selected solved problems with structured solution. All tasks can be found on the website <http://reseneulohy.cz/> or on the attached CD.

Keywords: electronic collection, solved problems, quantum physics