

ABOUT A POSSIBILITY OF A TIME
VARIATION OF THE ANGULAR MOMENTUM
OF A CLOSED SYSTEM OF MATERIAL POINTS

B. A. Okhrimenko

Taras Shevchenko Kyiv National University,
Faculty of Physics
(6, Academician Glushkov Ave., Kyiv 03022,
Ukraine; e-mail: vasilya@optics.ups.kiev.ua)

S u m m a r y

In most cases, the proof of a some statment is founded on some system of axioms and postulates. The refutation for this or that reason of one of the postulates entails a refusal of that statment, which is the ultimate goal of a given proof. In classical mechanics, two proofs of the conservation law of angular momentum are known. Each of these proofs contains such a postulate among the basic ones, whose validity cannot be spread to all without exception physical systems. In this connection, the conservation law of angular momentum is not spread to those physical systems, which do not fall under the action of the indicated postulate. As an example of such physical systems, the oscillatory moment of a molecule CO₂ and the rotary movement of absolutely rigid bodies are considered.