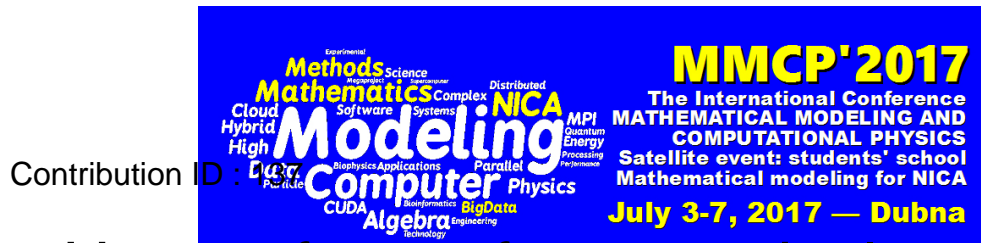


# International Conference “Mathematical Modeling and Computational Physics, 2017” (MMCP2017)



## User software for numerical study of Josephson junction with magnetic momenta

Thursday 06 Jul 2017 at 16:45 (00h15')

### Content :

Presented user software is aimed at the field of science research. Potential users are physicists who study Josephson junction with magnetic momenta. Computer implementation has been done by means of Wolfram Mathematica using the extensive capabilities of this system to create interactive dynamic objects. It enables to analyze the problem in amending all relevant physical parameters. The accuracy of the results is controlled. The users can choose a method for solving the ODE. Advantage of the developed software is the creation of a programming model that implements the method of Runge-Kutta-Fehlberg method in which a predetermined accuracy of calculation is ensured. The results can be displayed in different ways depending on what is needed to the user. The resulting graphs and tables can be used by physicists in their study, articles and presentations.

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