



Austrian Center for Didactics of Computer Algebra

Analytical Mechanics Problems with DERIVE

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Abstract:

Computer algebra systems (CAS), e.g. DERIVE, open new perspectives in learning and teaching physics. In the presentation, it is shown how DERIVE can be used for solving classical mechanics problems. Few samples of the problems and their solutions, on kinematics, dynamics of a point mass, rigid body rotational dynamics and application of the Lagrange's formalism, are presented. Some difficulties arising when using DERIVE are pointed out.
