

(V_1, V_2) , (p_1, p_2, p_3) , (x_1, x_2)

“Mathcad”.

$p_1=f(t), p_2=f(t), x_1=f(t), V_1=f(t)$
 $p_3=f(t), x_2=f(t), V_2=f(t)$

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: 1.

∴ “ ”, 1979. 2.

, 1986. 3.

, 1987. 4.

, 1982.

621.923

3D

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"Cosmos", "Nostran" "Ansys".

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[1],

«Cosmos» "Ansys"

[2],

[3]. , 100%

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	6	32	50	160

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: 05.03.01. – , 2002. – 469 . 2.

" ", . 2006. . 1. – . 497-504. 3.

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621.9-50