

GNU Octave, version 3.8.2

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Octave was configured for "x86\_64-pc-linux-gnu".

Additional information about Octave is available at <http://www.octave.org>.

Please contribute if you find this software useful.

For more information, visit <http://www.octave.org/get-involved.html>

Read <http://www.octave.org/bugs.html> to learn how to submit bug reports.

For information about changes from previous versions, type 'news'.

a = 1.000000

l = 1.000000

T = 0.200000

$\varepsilon$  = 0.000000

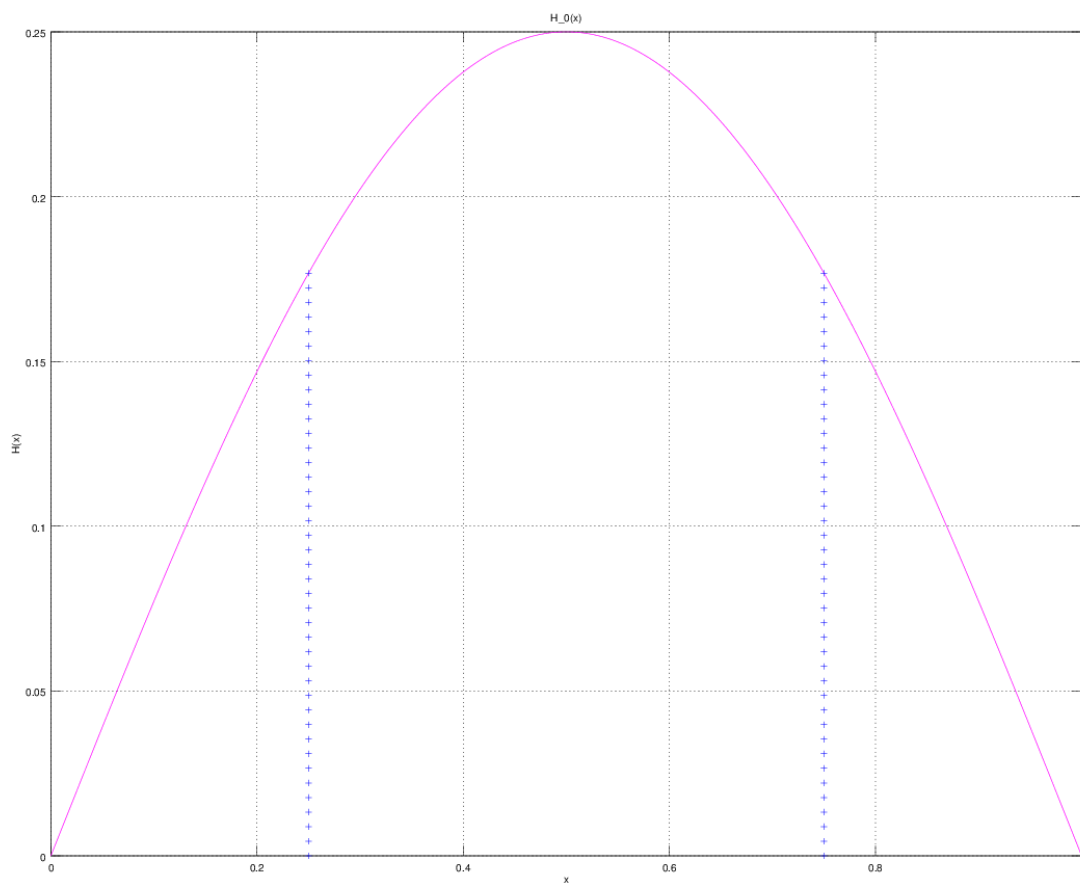
n = 10

k = 10

hx = 0.100000

ht = 0.020000

Начальное возмущение =  
 $0.25 * \sin(\pi * x)$



Всего демпферов: 2

Демпфер # 1

$x_1 = 0.250000$

Верхнее предельное значение  $w_1(t) =$   
15

Нижнее предельное значение  $w_1(t) =$   
NaN

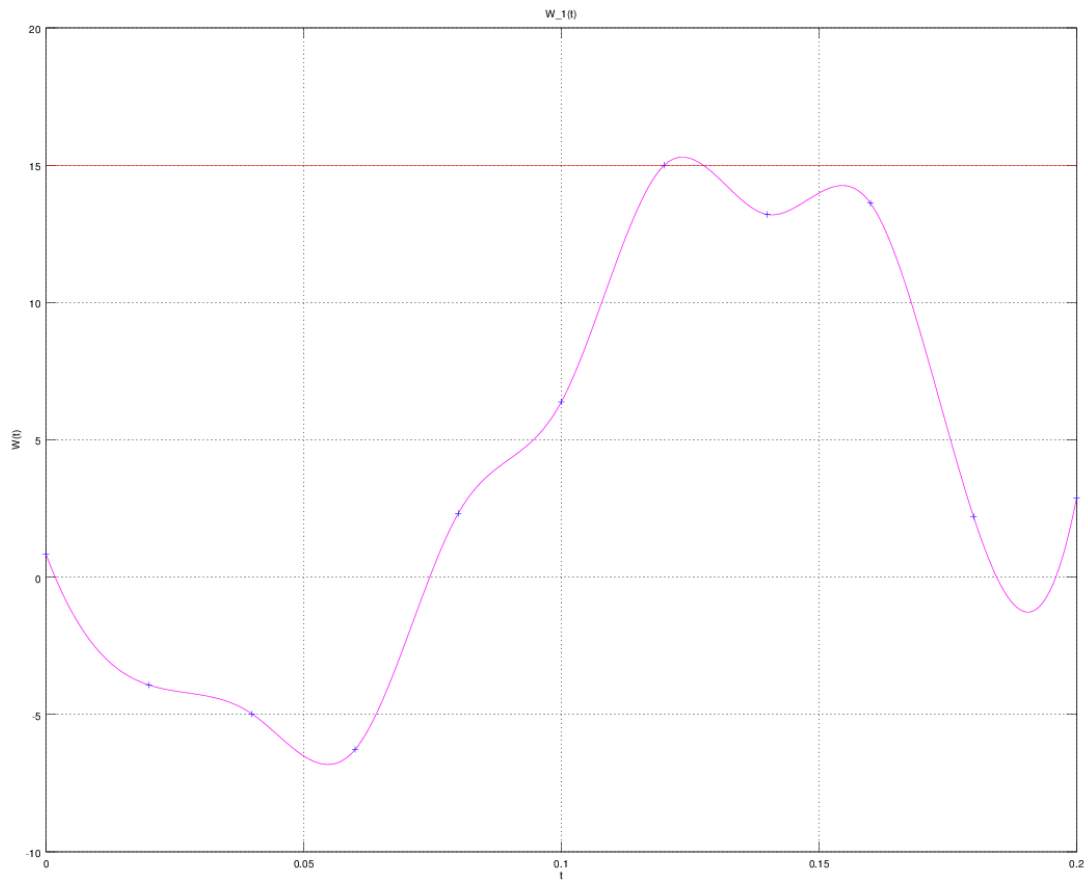
Управляющая функция  $w_1(t)$ :

0.84106

-3.92792

-4.98158

-6.27545  
2.31638  
6.37851  
14.99993  
13.20275  
13.61102  
2.20078  
2.88786



Демпфер # 2

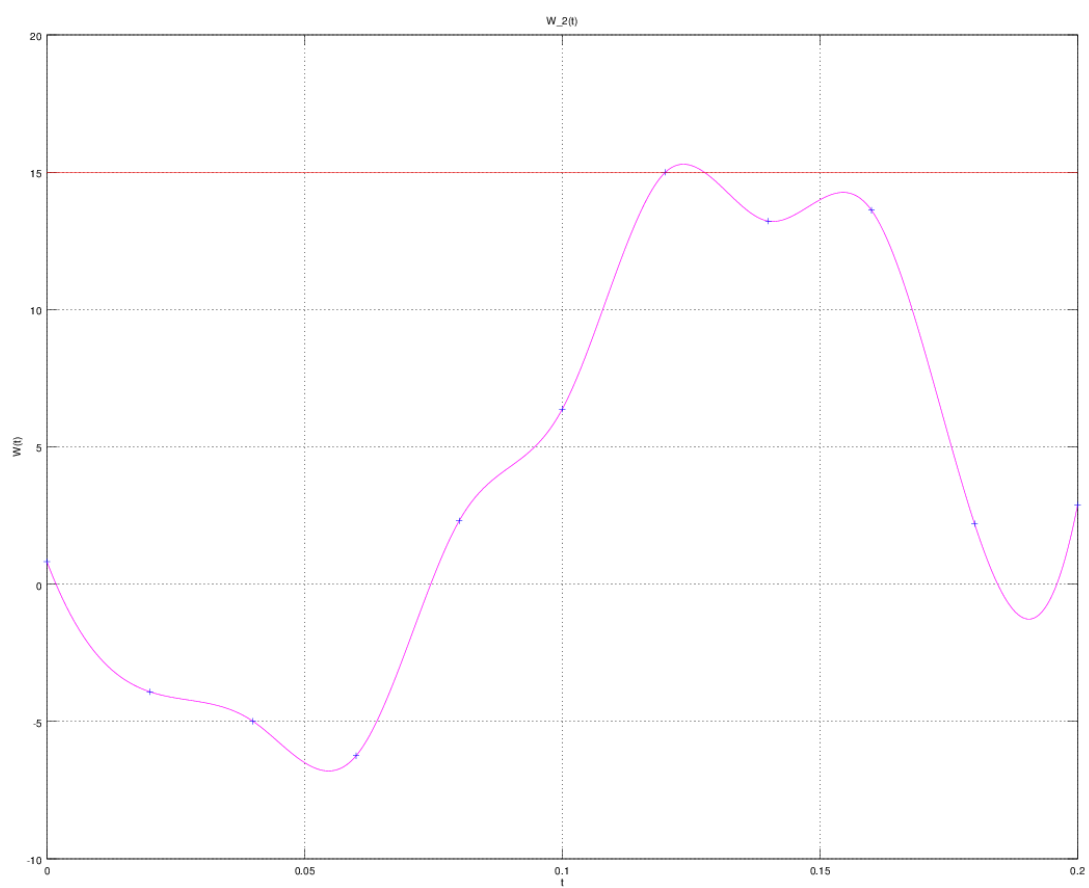
$x_2 = 0.750000$

Верхнее предельное значение  $w_2(t) = 15$

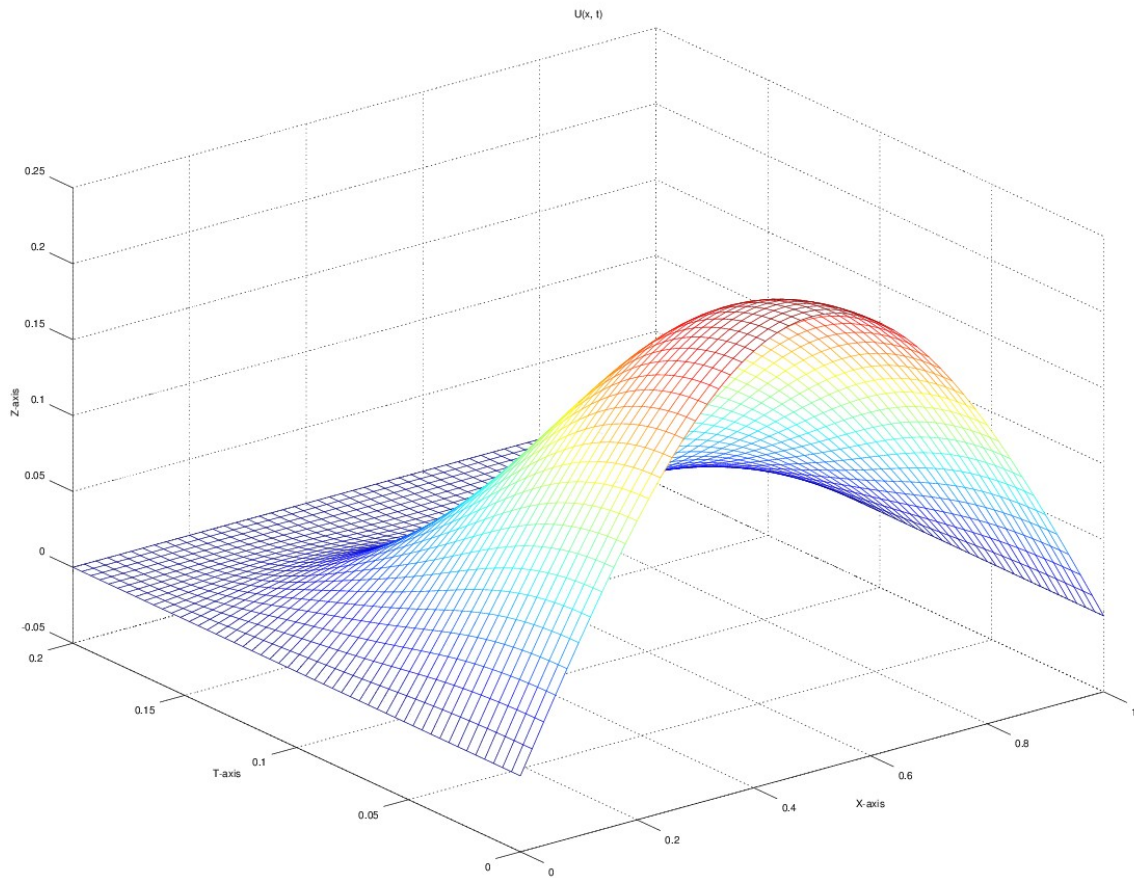
Нижнее предельное значение  $w_2(t) = \text{NaN}$

Управляющая функция  $w_2(t)$ :

0.81913  
-3.91998  
-4.99509  
-6.24924  
2.30493  
6.37136  
14.99470  
13.21651  
13.61178  
2.19775  
2.88866



$$E(T) = 5.6508e-10$$



$u(x, t)$

T = 0.000000: 0.000000 0.077254 0.146946 0.202254 0.237764 0.250000 0.237764 0.202254 0.146946 0.077254 0.000000

T = 0.020000: 0.000000 0.075299 0.143186 0.197462 0.232740 0.244942 0.232738 0.197457 0.143181 0.075297 0.000000

T = 0.040000: 0.000000 0.068693 0.131014 0.182070 0.216357 0.228408 0.216349 0.182058 0.131001 0.068685 0.000000

T = 0.060000: 0.000000 0.057551 0.110728 0.155515 0.186347 0.197347 0.186339 0.155503 0.110716 0.057543 0.000000

T = 0.080000: 0.000000 0.044977 0.086624 0.120845 0.143468 0.151412 0.143470 0.120848 0.086627 0.044979 0.000000

T = 0.100000: 0.000000 0.033688 0.063042 0.083615 0.094507 0.097879 0.094518 0.083630 0.063057 0.033699 0.000000

T = 0.120000: 0.000000 0.023021 0.041088 0.049619 0.050420 0.049890 0.050427 0.049630 0.041099 0.023027 0.000000

T = 0.140000: 0.000000 0.012437 0.021582 0.023429 0.019990 0.018019 0.019989 0.023428

0.021581 0.012436 0.000000

T = 0.160000: 0.000000 0.004383 0.007743 0.007582 0.004817 0.003458 0.004814 0.007577

0.007738 0.004380 0.000000

T = 0.180000: 0.000000 0.000721 0.001364 0.001119 0.000183 -0.000242 0.000182 0.001117

0.001361 0.000720 0.000000

T = 0.200000: 0.000000 0.000000 0.000002 -0.000000 -0.000003 0.000001 -0.000003 -0.000000

0.000002 0.000000 0.000000