

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

ε =

1.0000e-10

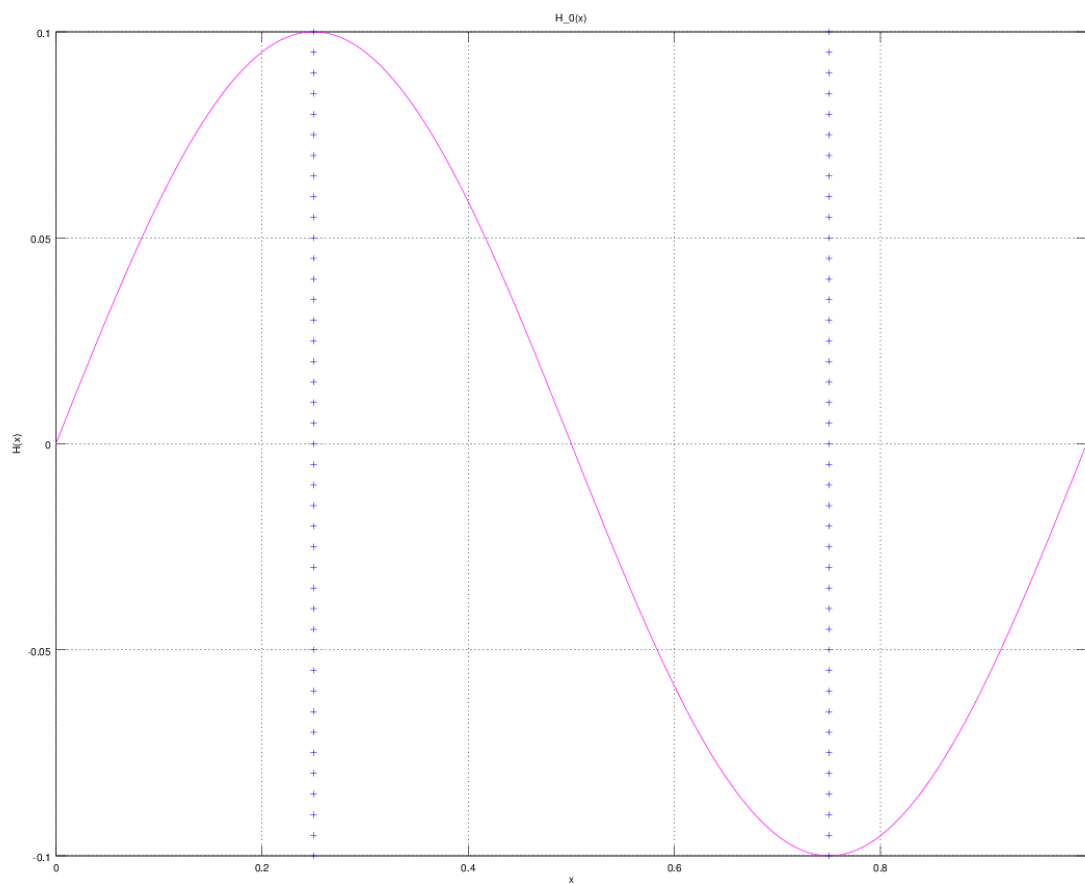
n = 10

k = 10

hx = 0.100000

ht = 0.020000

Начальное возмущение =
 $0.1 * \sin(2 * \pi * x)$



Всего демпфиров: 2

Демпфер # 1

$x_1 = 0.250000$

Верхнее предельное значение $w_1(t) =$
NaN

Нижнее предельное значение $w_1(t) =$
NaN

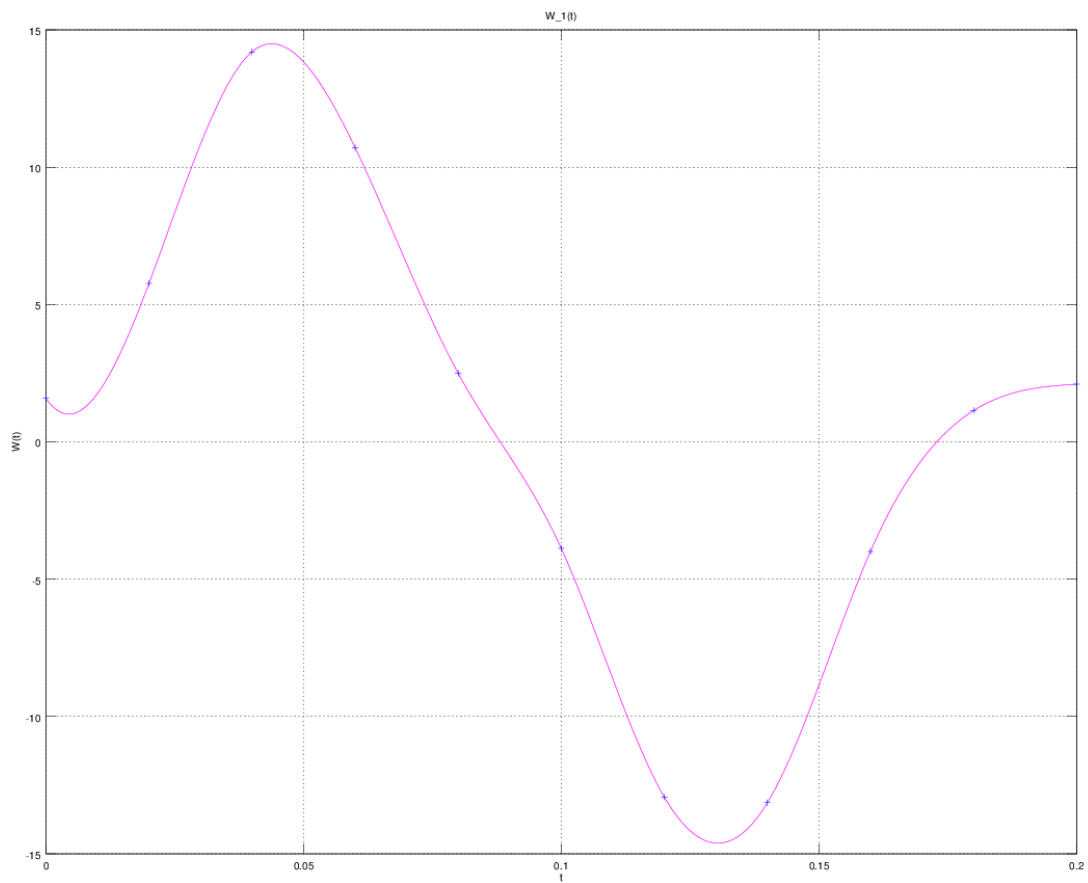
Управляющая функция $w_1(t)$:

1.5807

5.7664

14.1989

10.7087
2.4936
-3.8821
-12.9353
-13.1383
-3.9890
1.1372
2.0999



Демпфер # 2

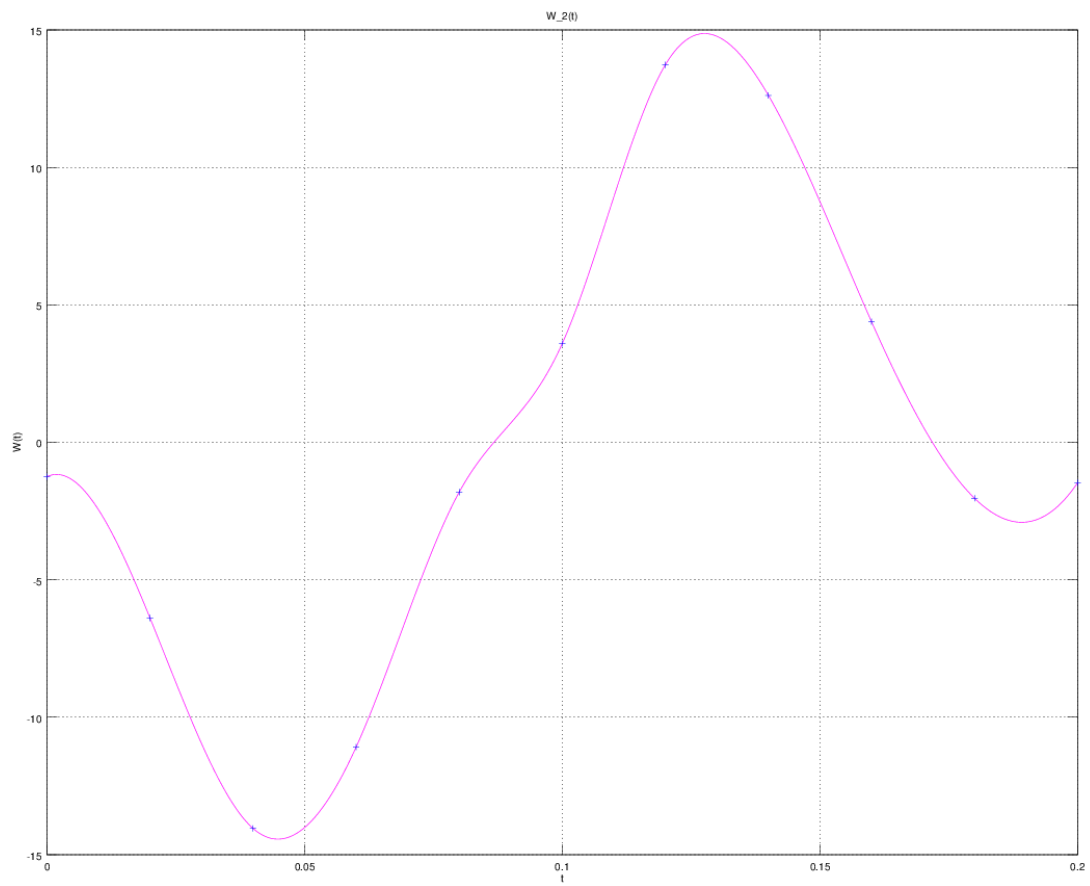
$x_2 = 0.750000$

Верхнее предельное значение $w_2(t) =$
NaN

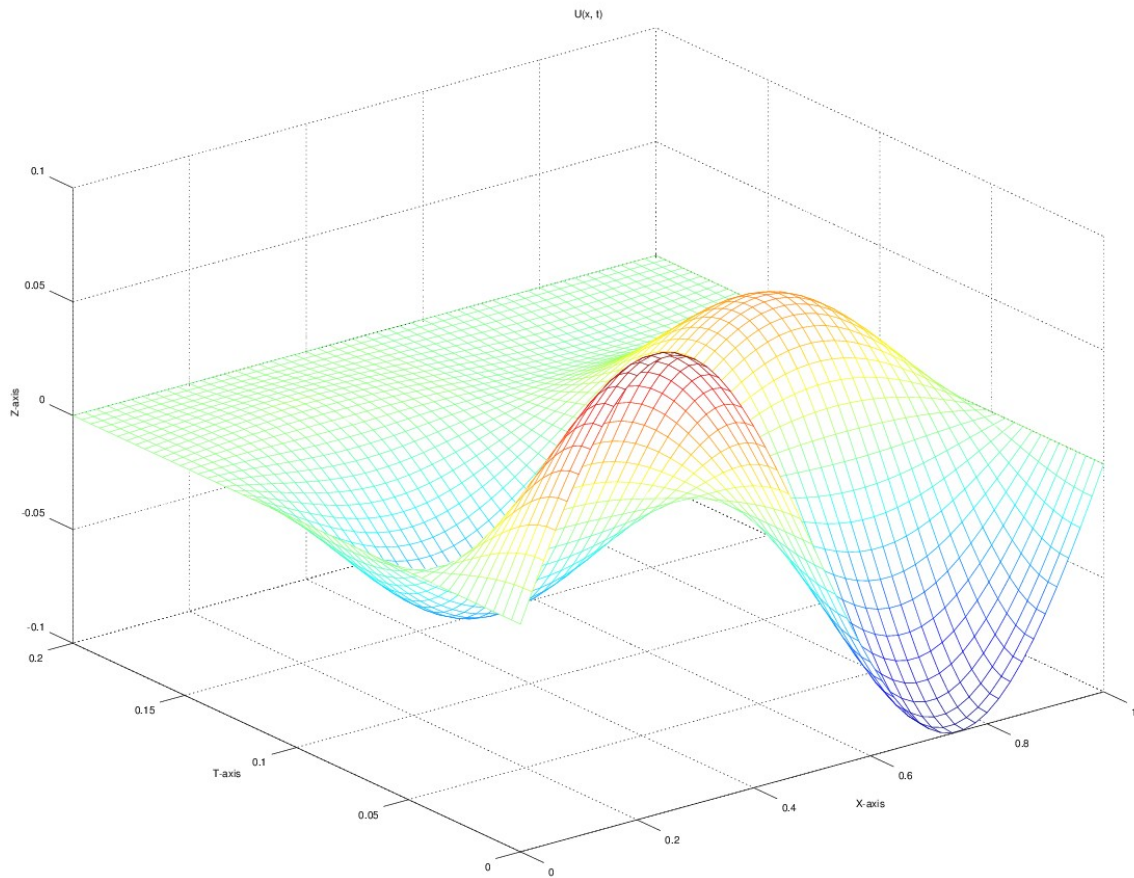
Нижнее предельное значение $w_2(t) =$
NaN

Управляющая функция $w_2(t)$:

-1.2509
-6.3879
-14.0441
-11.0867
-1.8136
3.5935
13.7290
12.6172
4.3888
-2.0364
-1.4704



$$E(T) = 2.1898e-10$$



$u(x, t)$

$T = 0.000000$: 0.000000 0.058779 0.095106 0.095106 0.058779 0.000000 -0.058779 -0.095106
 -0.095106 -0.058779 -0.000000
 $T = 0.020000$: 0.000000 0.045037 0.073339 0.073340 0.045036 -0.000015 -0.045084 -0.073430
 -0.073431 -0.045083 0.000000
 $T = 0.040000$: 0.000000 0.013544 0.022956 0.022951 0.013508 -0.000113 -0.013779 -0.023305
 -0.023300 -0.013744 0.000000
 $T = 0.060000$: 0.000000 -0.015957 -0.024999 -0.025054 -0.016146 -0.000363 0.015418 0.024350
 0.024406 0.015607 0.000000
 $T = 0.080000$: 0.000000 -0.029874 -0.048265 -0.048429 -0.030336 -0.000678 0.029091 0.047468
 0.047632 0.029553 0.000000
 $T = 0.100000$: 0.000000 -0.026550 -0.043355 -0.043590 -0.027177 -0.000835 0.025681 0.042528
 0.042764 0.026308 0.000000
 $T = 0.120000$: 0.000000 -0.013343 -0.022529 -0.022708 -0.013839 -0.000713 0.012537 0.021721
 0.021900 0.013034 0.000000
 $T = 0.140000$: 0.000000 -0.001789 -0.004064 -0.004131 -0.002011 -0.000407 0.001212 0.003392

0.003459 0.001434 0.000000

T = 0.160000: 0.000000 0.001923 0.002941 0.002932 0.001876 -0.000134 -0.002193 -0.003334
-0.003325 -0.002146 0.000000

T = 0.180000: 0.000000 0.001120 0.001945 0.001948 0.001122 -0.000019 -0.001187 -0.002066
-0.002069 -0.001189 0.000000

T = 0.200000: 0.000000 -0.000001 -0.000000 0.000000 -0.000002 -0.000004 -0.000001 -0.000001
-0.000001 -0.000000 0.000000