GNU Octave, version 3.8.2 Copyright (C) 2014 John W. Eaton and others. This is free software; see the source code for copying conditions. There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Octave was configured for "i586-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'.

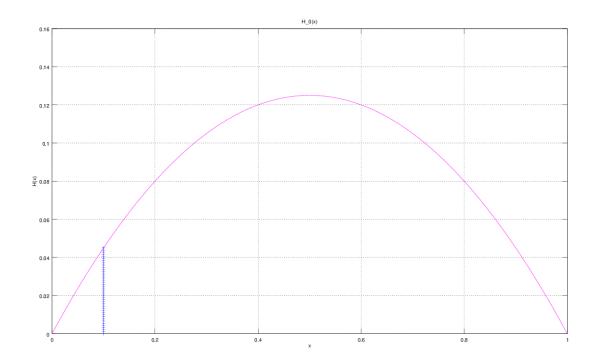
a = 1.000000 l = 1.000000 T = 0.050000 $\epsilon = 1.0000e-12$

Параметры сетки:

n = 16k = 8

hx = 0.062500ht = 0.006250

Начальное возмущение = @(x) 0.5 * x * (1 - x)



Всего демпферов: 1

Демпфер # 1

 $x_1 = 0.100000$

Верхнее предельное значение $w_1(t) = NaN$

Нижнее предельное значение $w_1(t) = NaN$

Управляющая функция w_1(t):

-68.2741

102.1401

-62.4882

62.6773

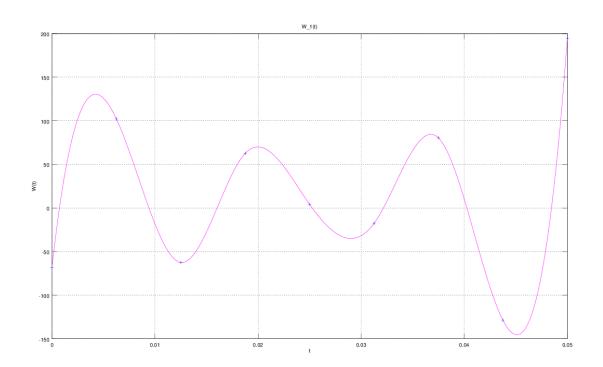
4.1469

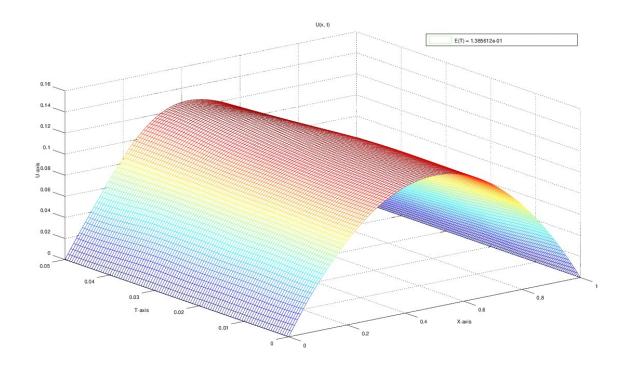
-17.6208

80.3552

-128.6328

194.2731





u(x, t) $T = 0.000000: 0.000000 \ 0.029297 \ 0.054688 \ 0.076172 \ 0.093750 \ 0.107422 \ 0.117188 \ 0.123047$ $0.125000\ 0.123047\ 0.117188\ 0.107422\ 0.093750\ 0.076172\ 0.054688\ 0.029297\ 0.000000$ T = 0.006250: $0.000000 \ 0.028986 \ 0.055440 \ 0.076716 \ 0.093956 \ 0.107450 \ 0.117165 \ 0.123026$ 0.124994 0.123062 0.117231 0.107478 0.093713 0.075758 0.053491 0.027440 0.000000T = 0.012500: $0.000000 \ 0.030005 \ 0.056687 \ 0.078144 \ 0.094897 \ 0.107787 \ 0.117153 \ 0.122936$ $0.124985 \ 0.123196 \ 0.117455 \ 0.107510 \ 0.092960 \ 0.073623 \ 0.050317 \ 0.025253 \ 0.000000$ T = 0.018750: $0.000000 \ 0.029937 \ 0.056425 \ 0.078879 \ 0.096275 \ 0.108879 \ 0.117604 \ 0.123027$ $0.125142\ 0.123539\ 0.117558\ 0.106513\ 0.090269\ 0.069954\ 0.047664\ 0.024457\ 0.000000$ $T = 0.025000: 0.000000 \ 0.030161 \ 0.057805 \ 0.079357 \ 0.096948 \ 0.110205 \ 0.119072 \ 0.124196$ 0.125885 0.123531 0.116117 0.103366 0.086457 0.067185 0.046159 0.023257 0.000000T = 0.031250: $0.000000 \ 0.030858 \ 0.057755 \ 0.080452 \ 0.097791 \ 0.111358 \ 0.121203 \ 0.126573$ $0.126938 \ 0.122119 \ 0.112522 \ 0.099294 \ 0.083482 \ 0.065087 \ 0.044208 \ 0.022392 \ 0.000000$ $T = 0.037500: 0.000000 \ 0.030261 \ 0.057897 \ 0.080729 \ 0.099628 \ 0.113753 \ 0.123469 \ 0.128100$ $0.126655 \ 0.119681 \ 0.109054 \ 0.096032 \ 0.080414 \ 0.062217 \ 0.042588 \ 0.021715 \ 0.000000$ T = 0.043750; $0.000000 \ 0.028353 \ 0.055944 \ 0.080862 \ 0.101403 \ 0.116770 \ 0.125387 \ 0.127591$ $0.124671 \ 0.117664 \ 0.107029 \ 0.093061 \ 0.076811 \ 0.059492 \ 0.040792 \ 0.020641 \ 0.000000$ T = 0.050000: $0.000000 \ 0.028098 \ 0.055052 \ 0.080693 \ 0.102262 \ 0.117376 \ 0.125432 \ 0.126813$ $0.123243\ 0.115825\ 0.104625\ 0.090375\ 0.074347\ 0.056823\ 0.038231\ 0.019379\ 0.000000$