

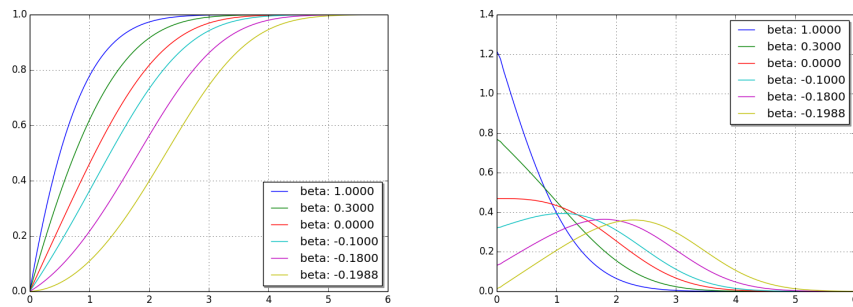
Mandatory assignment 2, MEK4300

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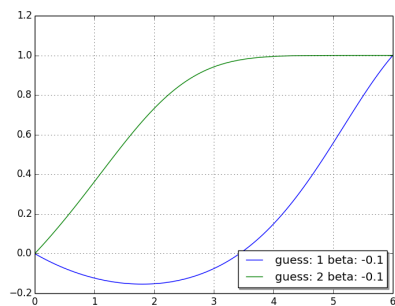
i

a)



In the first section I have reproduced figure 4-11 in White, with different β values

b)



(0,0) and (1,1)

The two guesses in the plots are with

ii

a)

In the first test with steady solver and $\text{Re} = 20$

$$C_D = 5.79392133271, C_L = 0.00871442276844, \Delta P = 0.11435196$$

which is pretty close compare to the benchmark :

$$C_D = 5.5567, C_L = 0.0106, \Delta P = 0.1172$$

b)

Using $dt = 0.0005$ and a mesh with: 5713 vertices 11433 elements