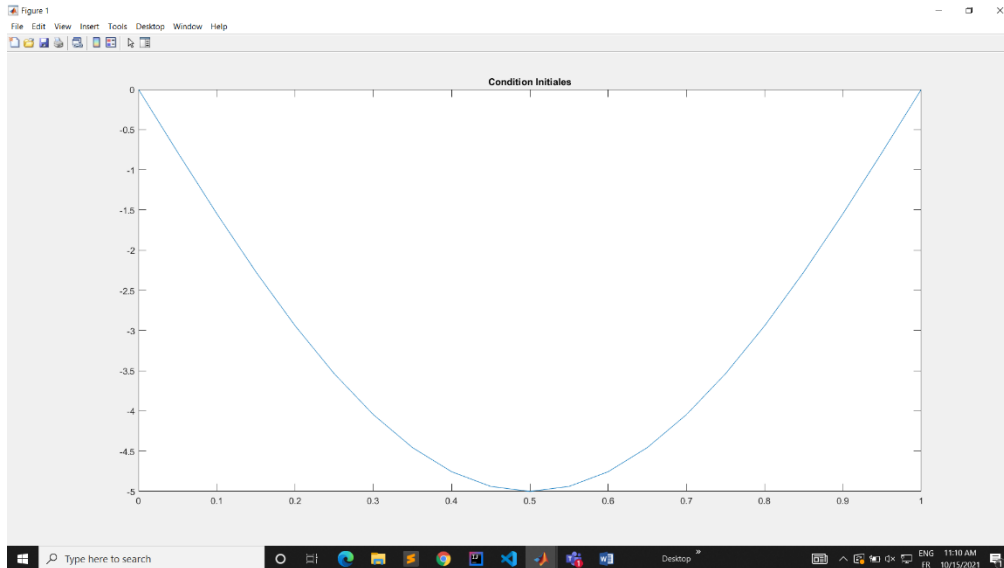


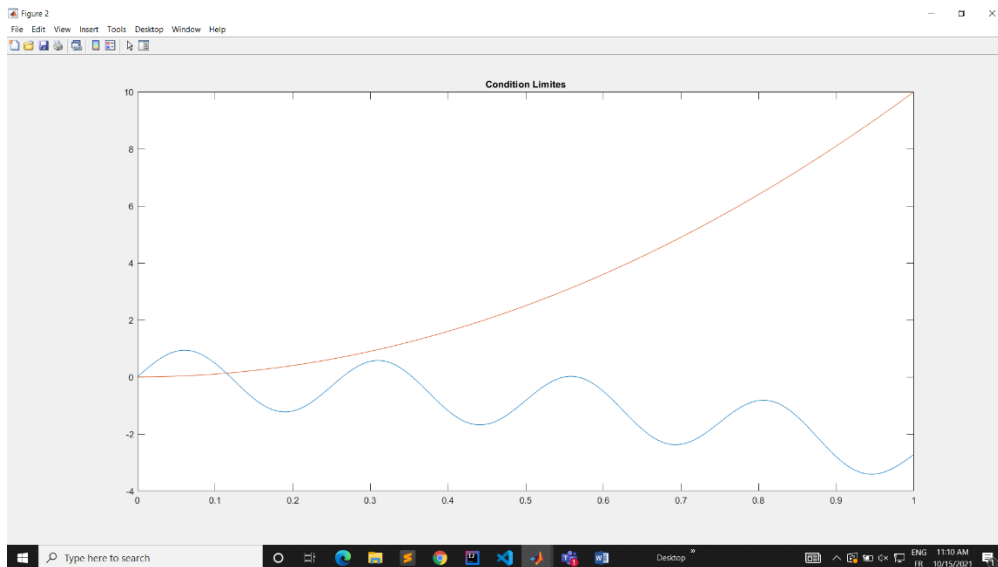
# TP note EDP ING2 GMI2 Kamdem Adrien

## Equation 1: Conditions aux limites de Dirichlet

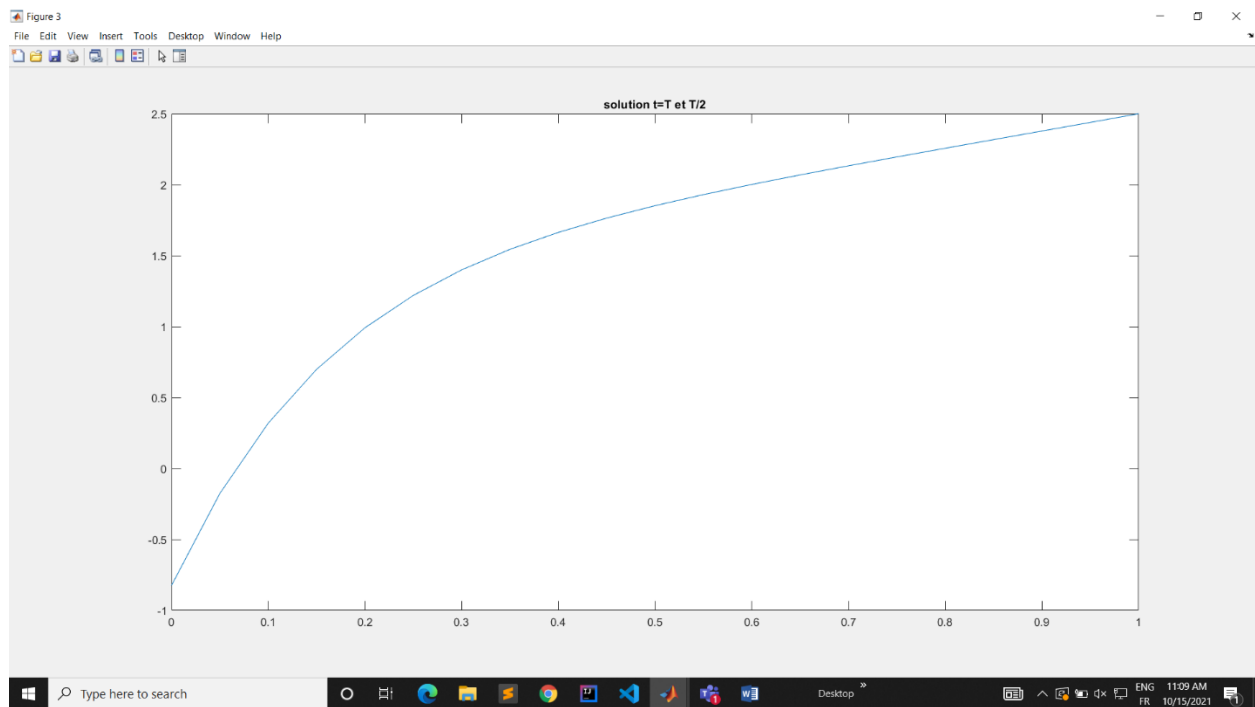
Graph des conditions initiales :



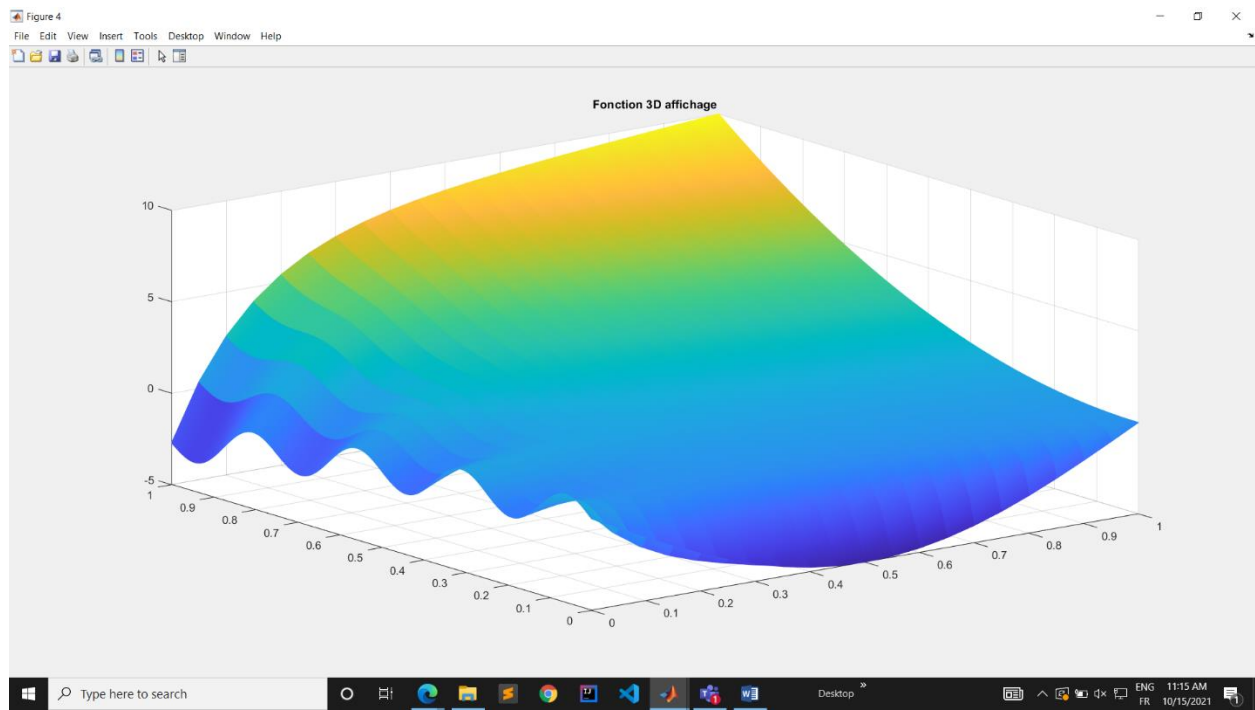
Graph des conditions aux limites de Dirichlet :



Graph de la fonction  $u(t_n, x_i)$  aux instant  $t$  différents ( $t=T, t=T/2$ ) :

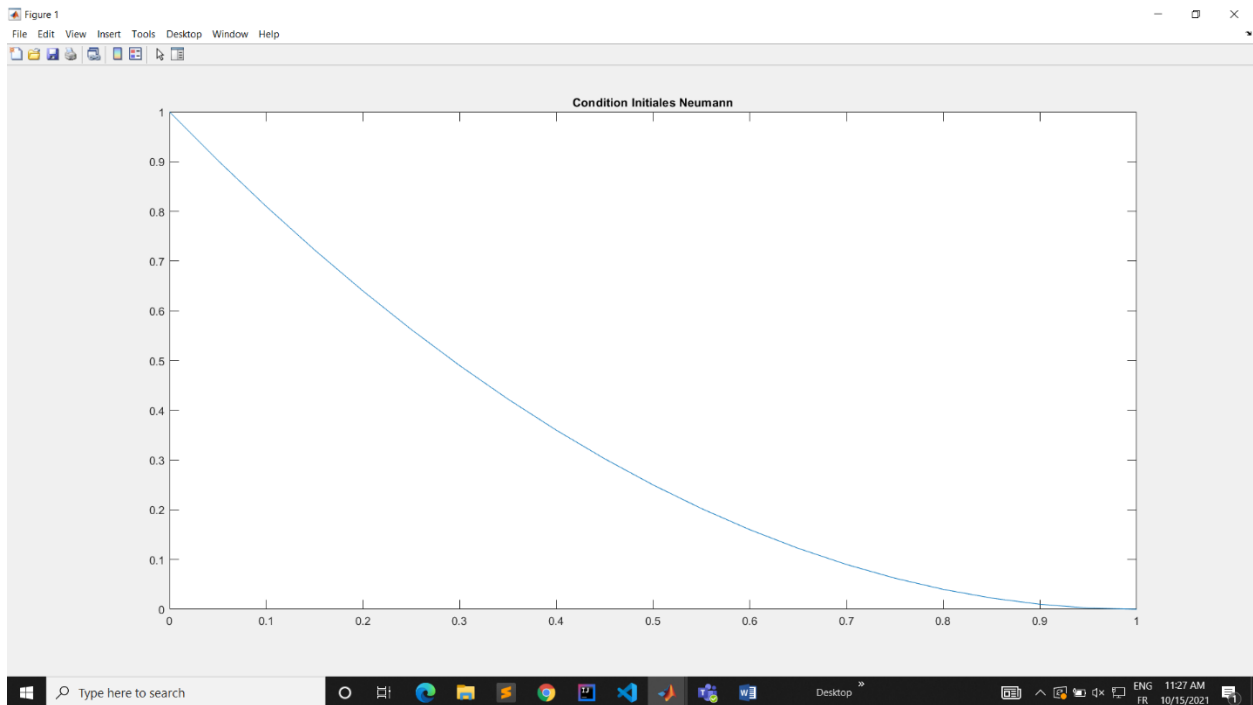


Graph de la surface de la solution du problème :

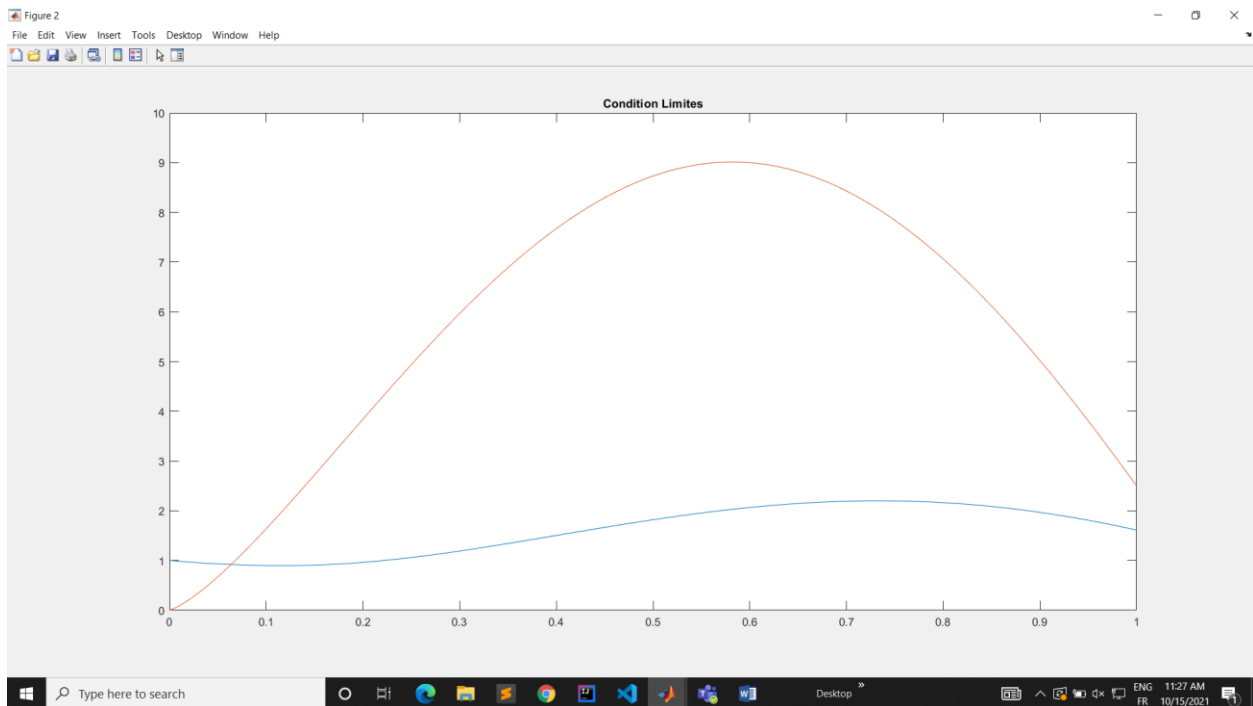


## Equation 2: Conditions aux limites de Neumann:

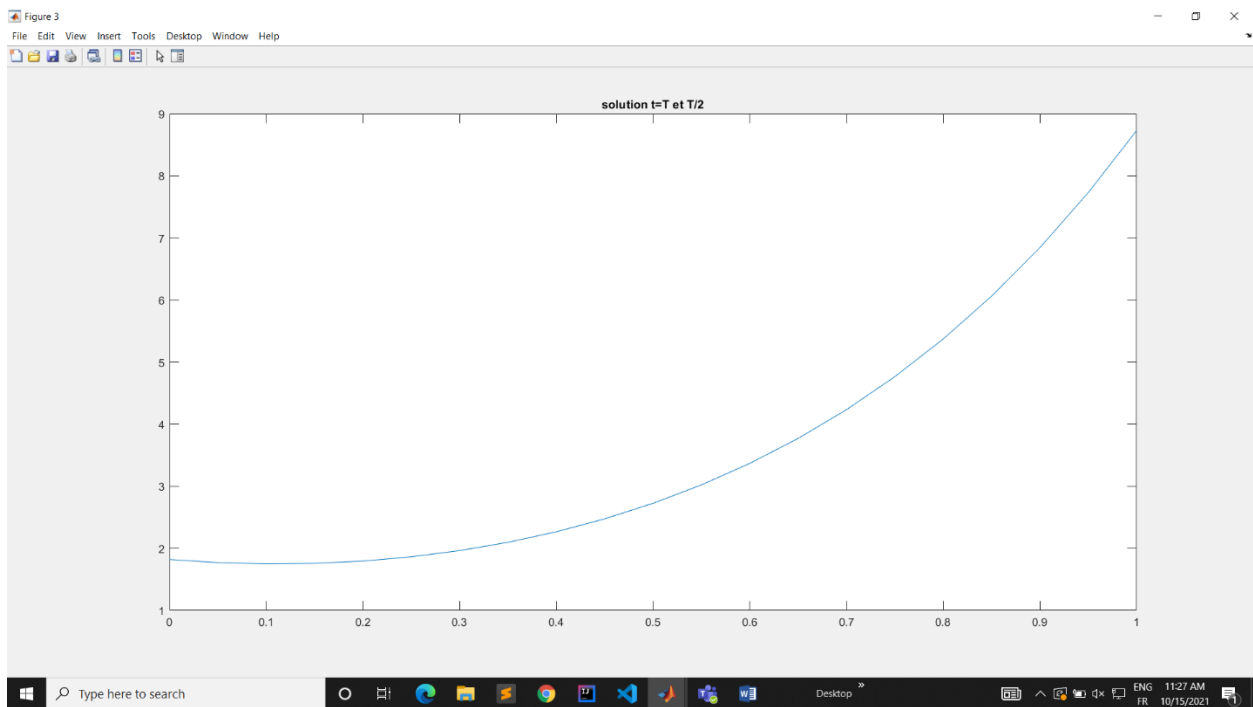
Graph des conditions initiales de Neumann :



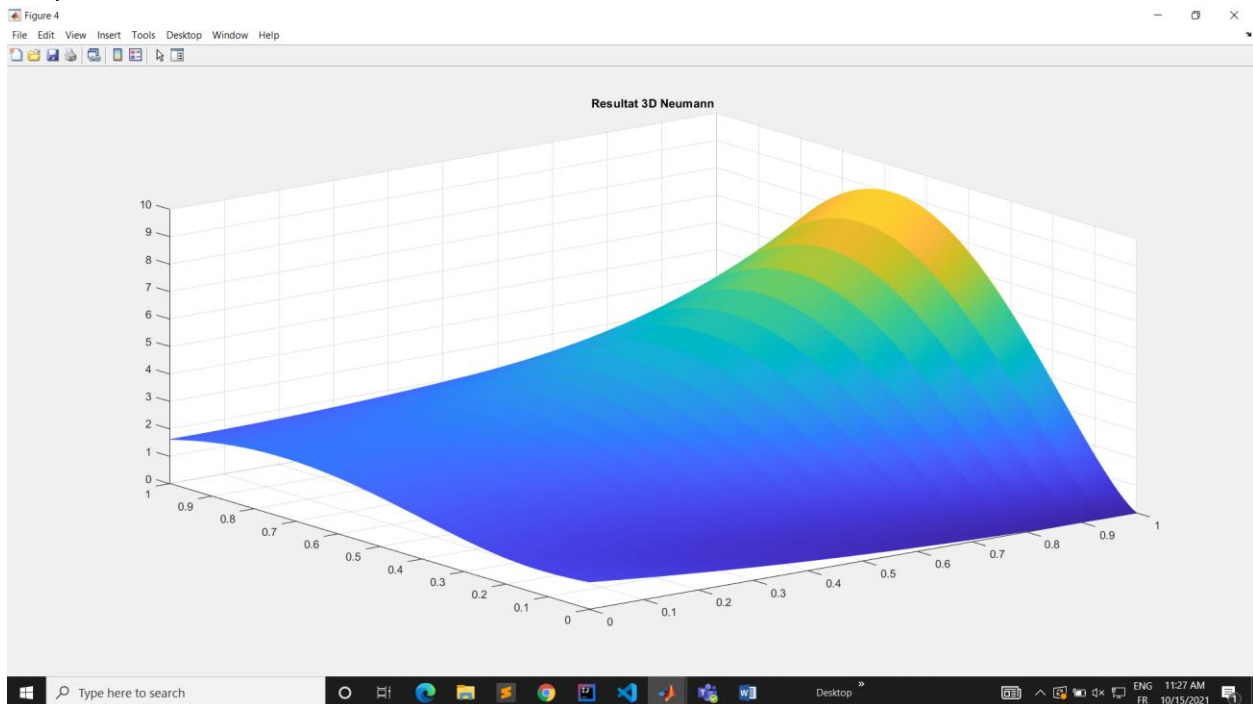
Graph des conditions limites de Neumann :



Graph de de la visualisation de la fonction à  $t=T$  et  $t=T/2$  :

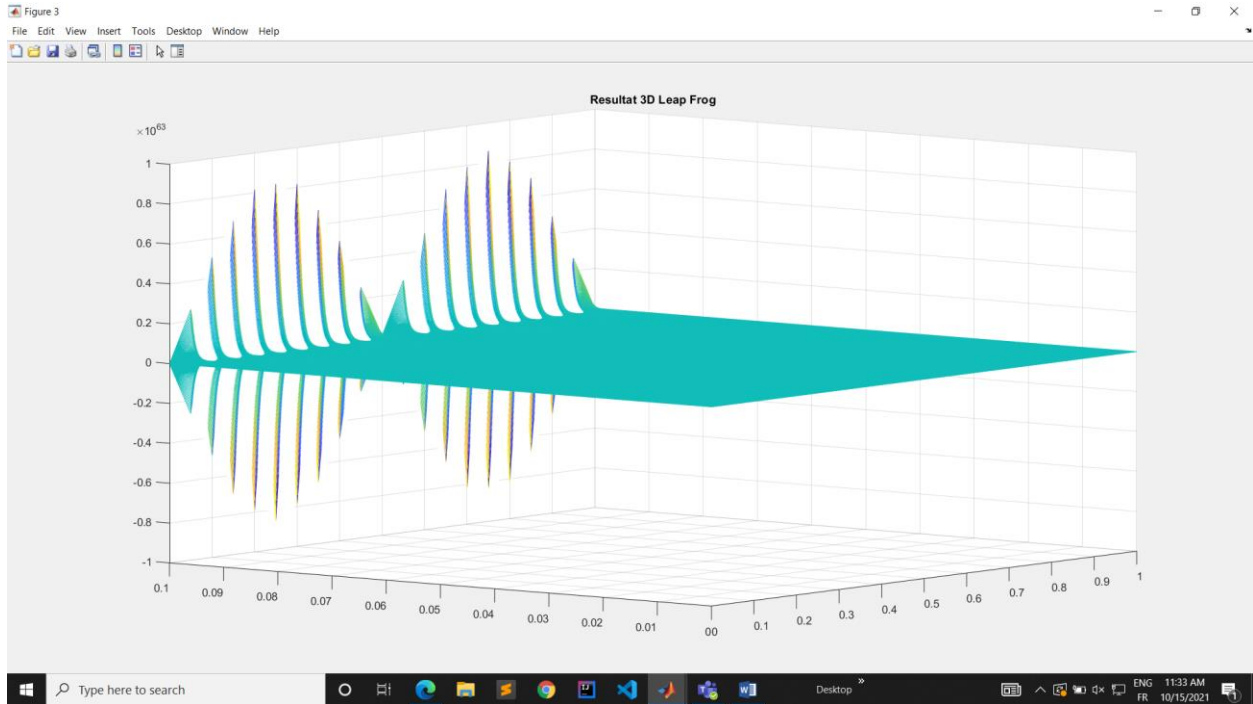


Graph de la surface de la solution :



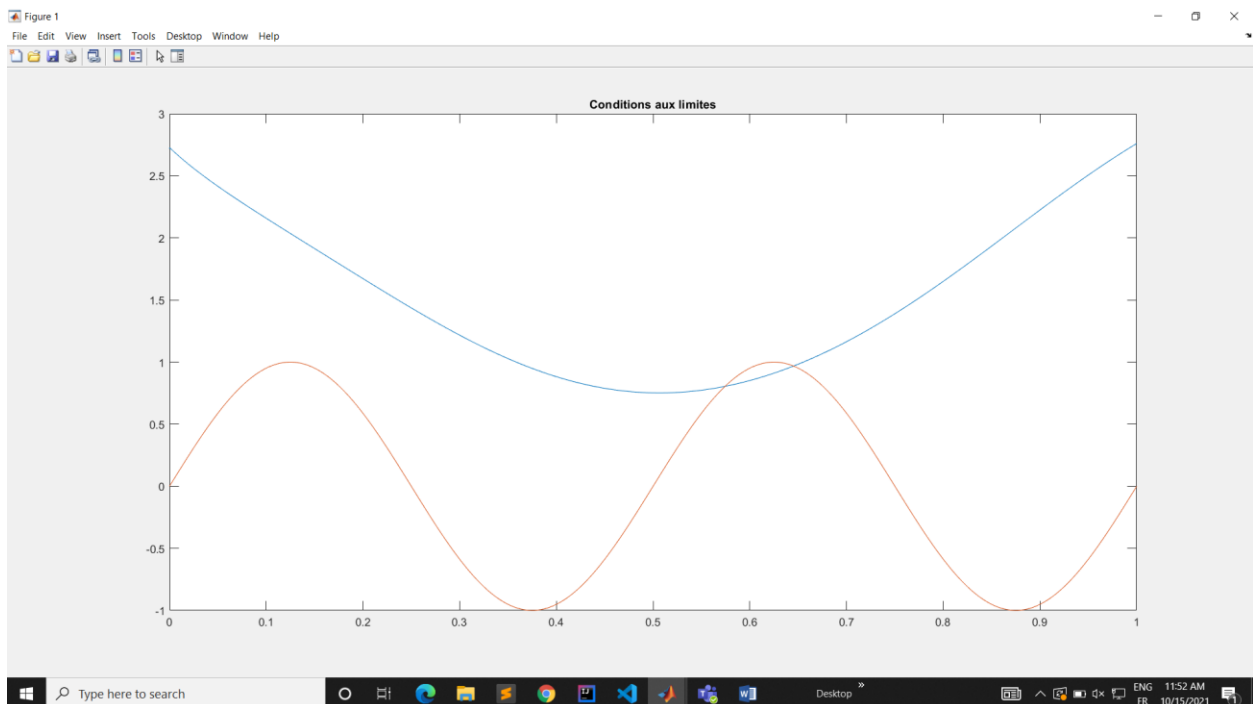
### Equation 3 aux conditions de Leap Frog :

Graph de la visualisation de la surface divergente :



### Equation 4 aux conditions limites de Neumann et de Dirichlet :

Condition limites :



Graph solution :

