```
mat
          [,1]     [,2]    [,3]      [,4]     [,5]    [,6] [,7]
[1,]   0.00000  0.00000 0.00000  0.000000  0.00000 0.00000   0
[2,] 106.99343  0.00000 0.00000  0.000000  0.00000 0.00000   0
[3,]  59.80105 34.14229 0.00000  0.000000  0.00000 0.00000   0
[4,] 154.47476 66.41345 31.58699  0.000000  0.00000 0.00000   0
[5,] 104.70339 99.09019 60.51983 186.283045  0.00000 0.00000   0
[6,]  76.03356 46.81365 33.70269  36.852395 85.89954 0.00000   0
[7,]  82.58302 42.41580 21.41603   2.250307 120.65021 20.22307   0
```