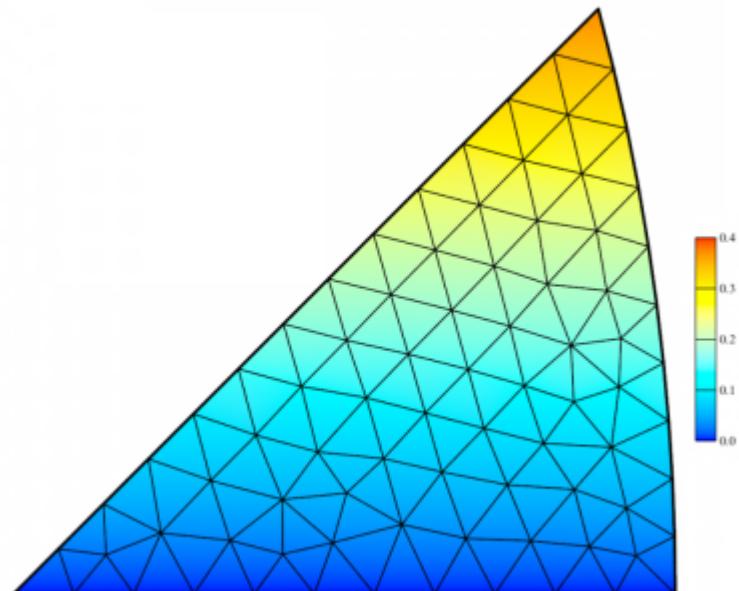
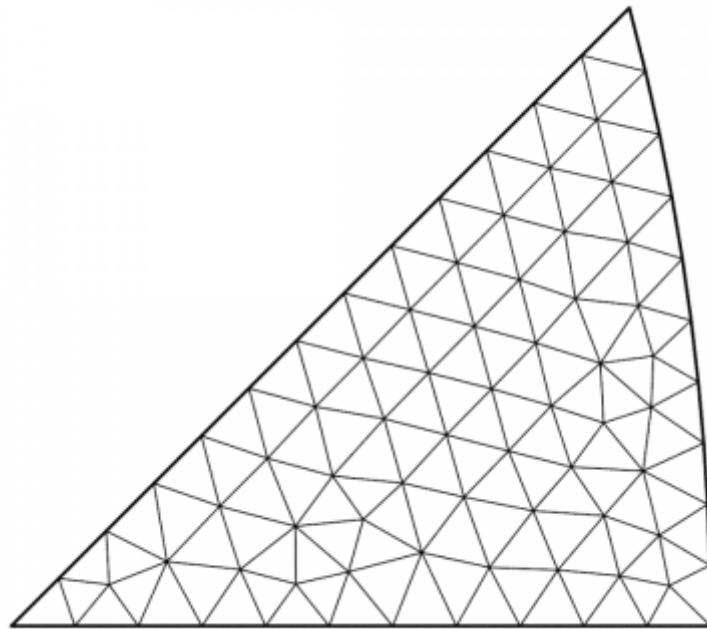


# Générer un maillage du triangle stéréographique standard et y tracer un champ scalaire

```
neper -T -n 1 -domain "stdtriangle(10)" -dim 2 -o stdtri
neper -M stdtri.tess -cl 0.04 -mesh2dalgo fron -statnode x,y
awk '{print $2}' stdtri.stnode > data
neper -V stdtri.msh -showeltdl all -dataeltdrad 0.001 \
    -dataelt2dedgerad 0.0005 -cameraangle 3.4 -print stdtri \
    -datanodecol scal:data -dataeltcol from_nodes \
    -datanodescale 0.0:0.1:0.2:0.3:0.4 \
    -print stdtri-col
```





## Convertir un maillage périodique pour Zebulon

```
neper -T -n 10 -dim 3 -per 1 -oriformat geof -o polyper
neper -M polyper.tess -for geof
```

Convertir un fichier .per en format Zebulon

```
from collections import defaultdict

def do_mpc(per_filename):
    pairs = np.loadtxt('per_filename', usecols=[0,1])
    pairs_dir = np.loadtxt('per_filename', usecols=[2,3,4])
    pair_counter = 0
    cells = ""
    bc_u = []
    mpc = defaultdict(list)
    for idx, n in enumerate(pairs):
        mpc[n[1]].append(n[0])

    for slave, master in mpc.iteritems():
        cells += "**nset cell{:0d}\n".format(pair_counter)
        if len(master)==1:
            n = [slave, master[0]]
            cells += "{:.0f} {:.0f}\n".format(n[0], n[1])
            bc_u.append('**mpc2 {:.0f} U1 {:.0f} U1\n**mpc2 {:.0f} U2 {:.0f}'
```

```
U2\n**mpc2 {:.0f} U3 {:.0f} U3'.format(n[0], n[1], n[0], n[1], n[0], n[1]))  
    else:  
        cells += " ".join(["{:.0f}".format(i) for i in master]) + "  
{:.0f}\n".format(slave)  
        bc_u.append('**mpc1 cell{:0d} U1\n**mpc1 cell{:0d} U2\n**mpc1  
cell{:0d} U3'.format(pair_counter, pair_counter, pair_counter))  
  
    pair_counter += 1  
  
    with open('cells_geof', 'w') as cell_geof:  
        cell_geof.write(cells)  
    with open('mpc_for_inp', 'w') as mpc_file:  
        mpc_file.write('\n'.join(bc_u))  
  
    return '\n'.join(bc_u)
```

## Référents

- Romain Quey - Aurélien Villani

From:

<https://portail.emse.fr/dokuwiki/> - **DOC**

Permanent link:

<https://portail.emse.fr/dokuwiki/doku.php?id=recherche:softs:neper:exemples>



Last update: **03/07/2018 13:15**