```
cd ..
make -f makefile-Tnum
cd $ici
```

Some parameters for the compilation

```
../Tnum.exe << ** > res
 &geom
          zmat=T
          nat=10
          sym=f
 /
 H
 C 1
 C 2 1
 C 2 1 3
 H 3 2 4
 H 3 2 5
 H 3 2 5
 H 4 2 3
 H 4 2 8
 H 4 2 8
```

Useful parameters to define coordinates:

zmat=t: coordinates defined with a zmatrix
nat: number of atoms
sym: if t, enables to perform linear combination of coordinates (see dat_HCN).

**Zmatrix**:
The integers are the numbers of the previously defined atoms.

You can change the atomic symbol by a mass (real)

```
0   0 0   0 0 0   0 0 1   0 0 0   0 0 0   0 0 1   0 0 0   0 0 0
 &niveau
          nrho=2
          read_nameQ=t
 /
rH    2.06280
rCC   2.72444
aCCH  2.03908
rCC   2.72444
aCCH  2.03908
dih   3.14159
rCH21 2.09066
aCH21 1.90364
dCH21 0.00000
rCH22 2.09066
aCH22 1.90364
dCH22 2.09439510258113692
rCH23 2.09066
aCH23 1.90364
dCH23 -2.09439510258113692
rCH31 2.09066
aCH31 1.90364
dCH31 0.00000
rCH32 2.09066
aCH32 1.90364
dCH32 2.09439510258113692
```

List of 3nat-6 numbers:
1 active coordinates
0 frozen coordinates

nrho helps to define the volume element:
0: Euclidian (rho=jacobian)
1: Wilson (rho=1)
2: product of 1D-volume element: dR.dphi.sin(th)dth…

read_nameQ: if t, reads the name of the variables

Name and value of variable in the zmatrix order.

```
rCH33 2.09066
aCH33 1.90364
dCH33 -2.09439510258113692
**
```