

Debug

beta=0.5

在各个程序入口和出口加入print，看卡在哪里

```

cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    29
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    30
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    31

cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    6
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    7
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    8

cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    57
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    58
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    59

cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    242
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    243
loopsubroutinecomplete
loopcomplete
cutoffcomplete
diagstarts
diagsubroutinecomplete
diagscomplete
loopstart
    244
```

看来每次
卡的程度
还不一样

而且只是在
loop更新里
面卡住

将热化设为50步

```
rs > wtake1 > Desktop > code > SSE
1 1 4 4 10 50 50
```

```
loopsubroutinecomplete
loopstart
    49
loopsubroutinecomplete
loopstart
    50
loopsubroutinecomplete
istepend
loopstart
    51
loopsubroutinecomplete
loopcomplete
loopstart
    52
loopsubroutinecomplete
loopcomplete
loopstart
    53
loopsubroutinecomplete
loopcomplete
loopstart
    54
loopsubroutinecomplete
```

可以看到50步的热化的确卡不住

但是继续在测量那里卡住了

都设得很小，看来就有可能跑得出来

```
> wtake1 > Desktop > code > SSEAll > DLoopSSE
1 1 4 4 1 50 50
```

```
XXZYX --zsh--
    94
loopsubroutinecomplete
loopstart
    95
loopsubroutinecomplete
loopstart
    96
loopsubroutinecomplete
loopstart
    97
loopsubroutinecomplete
loopstart
    98
loopsubroutinecomplete
loopstart
    99
loopsubroutinecomplete
loopstart
    100
loopsubroutinecomplete
mstepend
binend
(base) wtake1@WtakedeMac-mini XXZYX %
```

进一步check是loopupdate中哪一部分出现问题

```
vertexlist
vertexlistend
wolffstart!
      78
wolffend!
loopsubroutinecomplete
vertexlist
vertexlistend
wolffstart!
      79
wolffend!
loopsubroutinecomplete
vertexlist
vertexlistend
wolffstart!
      80
wolffend!
loopsubroutinecomplete
vertexlist
vertexlistend
wolffstart!
      81
```

果然就是类wolff
程序的问题

```
do !当nm>=nn的时候算是一个mc

l=l+1
do
v0=int(ran()*(mm))*4+int(4.0*ran())!随机选取一个上层的vertex leg
if(vertexlist(v0)>=0) exit
enddo

v1=v0
vertex(v0)=l
n=1

print*,n,nm
```

第24次，很奇怪，print不出
n,nm的值了

猜测是random的问题？

```
1      24
1      24
1      24
1      24
1      28
1      28
1      28
1      32
1      36
1      36
1      36
1      36
1      36
1      36
1      36
1      36
1      36
1      36
1      36
1      38
1      38

wolffend!
loopsubroutinecomplete
wolffstart!!!!
      24
```


猜测是randomleg的问题?

```
l=l+1
write(*,*) "randomvertex leg"
do
v0=int(ran()*(mm))*4+int(4.0*r
if(vertexlist(v0)>=0) exit
enddo
write(*,*) "randomend"
v1=v0
vertex(v0)=l
n=1
print*,n,nm
```

```
randomend
          1          34
randomvertex leg
randomend
          1          34
randomvertex leg
randomend
          1          36
randomvertex leg
randomend
          1          36
randomvertex leg
randomend
          1          40
randomvertex leg
randomend
          1          40
wolffend!
loopsubroutinecomplete
wolffstart!!!!!!
          349
randomvertex leg
```

```
2344638
vertexlist(v0)>=0 doesn't happen
2344639
vertexlist(v0)>=0 doesn't happen
2344640
vertexlist(v0)>=0 doesn't happen
2344641
vertexlist(v0)>=0 doesn't happen
2344642
vertexlist(v0)>=0 doesn't happen
2344643
vertexlist(v0)>=0 doesn't happen
2344644
vertexlist(v0)>=0 doesn't happen
2344645
^C      2344647
vertexlist(v0)>=0 doesn't happen
2344648
vertexlist(v0)>=0 doesn't happen
2344649
vertexlist(v0)>=0 doesn't happen
(base) wtake1@WtakedeMac-mini XXYZ %
```

每进行一次随机选腿计数一次，
发现卡住的时候已经很多次了但
exit不出

```

28 -1
1902499
vertexlist(v0)>=0 doesn't happen
7 -1
1902500
vertexlist(v0)>=0 doesn't happen
8 -1
1902501
vertexlist(v0)>=0 doesn't happen
23 -1
1902502
vertexlist(v0)>=0 doesn't happen
54 -1
1902503
^C vertexlist(v0)>=0 doesn't happen
60 -1
1902505
vertexlist(v0)>=0 doesn't happen
61 -1
1902506
vertexlist(v0)>=0 doesn't happen

(base) wtake1@WtakedeMac-mini XXYZ %

```

```
result
      86880
vertexlist(v0)>=0 doesn't happen
      65          -1          -1          -1          -1          -1          -1
-1          -1          -1          -1          -1          -1          -1          -1
      -1          -1          -1          -1          -1          -1          -1          -1
-1          -1          -1          -1          -1          -1          -1          -1
      -1          -1          -1          -1          -1          -1          -1          -1
-1          -1          -1          -1          -1          -1          -1          -1
      -1          -1          -1          -1          -1          -1          -1          -1
-1          -1          -1          -1          -1          -1          -1          -1
      -1          -1          -1          -1          -1          -1          -1          -1
      -1          20
```

确认了就是beta太小导致虚时间序列太短，很容易产生这个序列全单位算符的情况，然后就卡在这种情况下。改代码也不是很有必要，因为研究高温（beta比较小）的意义不大