Debug

beta=0.5

在各个程序入口和出口加入print,看卡在哪里

0 • • 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 loopsubroutinecomplete loopcomplete cutoffcomplete diagstarts diagsubroutinecomplete diagscomplete loopstart loopsubroutinecomplete loopcomplete cutoffcomplete diagstarts diagsubroutinecomplete diagscomplete

loopstart

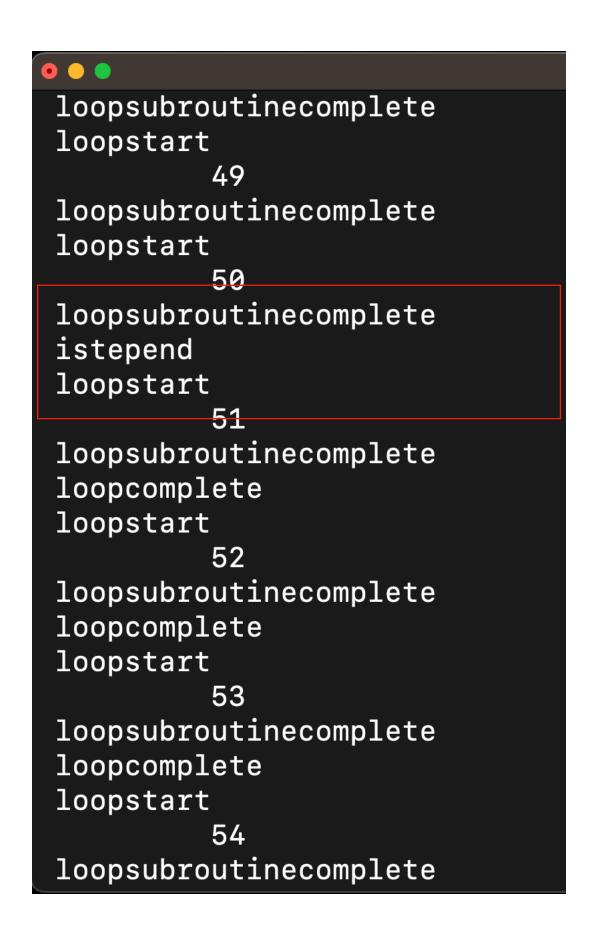
• • cutoffcomplete diagstarts diagsubroutinecomplete diagscomplete loopstart 57 loopsubroutinecomplete loopcomplete cutoffcomplete diagstarts diagsubroutinecomplete diagscomplete loopstart 58 loopsubroutinecomplete loopcomplete cutoffcomplete diagstarts diagsubroutinecomplete diagscomplete loopstart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

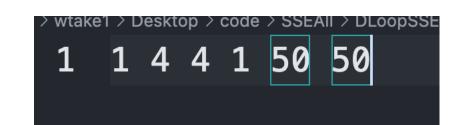
将热化设为50步

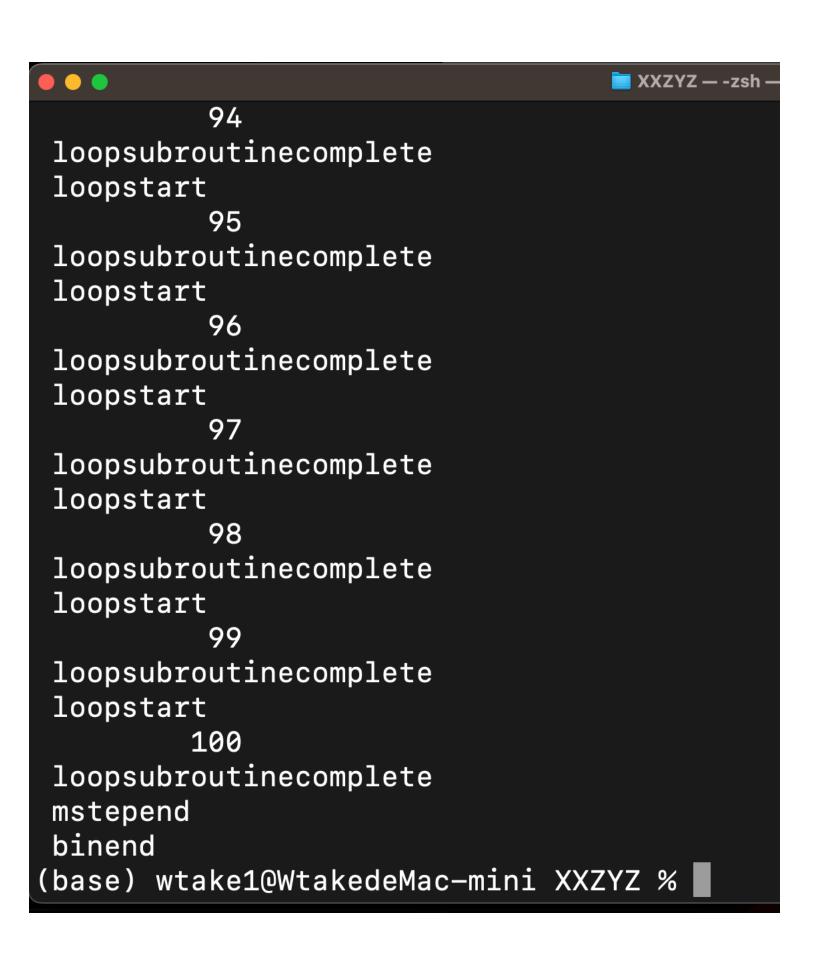


可以看到50步的热化的确卡不住

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





进一步check是loopupdate中哪一部分出现问题

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

果然就是类wolff 程序的问题



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"
                             randomend
v1=v0
                                                 34
                             randomvertex leg
vertex(v0)=l
                             randomend
n=1
                                                 34
                             randomvertex leg
                             randomend
print*,n,nm
                                                 36
                             randomvertex leg
                             randomend
                                                 36
                             randomvertex leg
                             randomend
                                                 40
                             randomvertex leg
                             randomend
                                                 40
                             wolffend!
                             loopsubroutinecomplete
                             wolffstart!!!!!!
                                     349
                             randomvertex leg
```

```
XXZYZ —
     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
       2344647
^C
 vertexlist(v0)>=0 doesn't happen
     2344648
 vertexlist(v0)>=0 doesn't happen
     2344649
 vertexlist(v0)>=0 doesn't happen
(base) wtake1@WtakedeMac-mini XXZYZ %
```

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

```
if(vertexlist(v0)>=0) then
   exit
   else
   write(*,*) times
   write(*,*) "vertexlist(v0)>=0 doesn't happen"
   print*, v0, vertexlist(v0)
   endif
             XXZYZ — -zsh
enddo
                       28
                                   -1
                  1902499
              vertexlist(v0)>=0 doesn't happen
                                   -1
                  1902500
              vertexlist(v0)>=0 doesn't happen
                  1902501
              vertexlist(v0)>=0 doesn't happen
                  1902502
              vertexlist(v0)>=0 doesn't happen
                       54
                                   -1
                  1902503
              ^C vertexlist(v0)>=0 doesn't happen
                                   -1
                  1902505
              vertexlist(v0)>=0 doesn't happen
                  1902506
              vertexlist(v0)>=0 doesn't happen
              (base) wtake1@WtakedeMac-mini XXZYZ %
```

```
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 -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
```

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。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