

```

      PROGRAM e2phas
*****
* Conversion of dielectric functions to phase of sigma function.
*
* the standard input file must have the format x eps1 eps2          *
* The outputfile comes as: x phase                                  *
*****
      REAL X(100000),e1,e2
      complex epsil(100000),sig
      INTEGER I,mm
      mm=100000
      do 10 i=1,mm
        READ(*,*,END=11) X(i),e1,e2
        epsil(i)=cmlpx(e1,e2)
10      continue
11      mm=i-1
      do 25 i=1,mm
        sig=(0.,-1.)*(epsil(i)-1)*x(i)*0.5*0.0333795
        write(*,*) x(i),atan(aimag(sig)/real(sig))
25      continue
      END

```