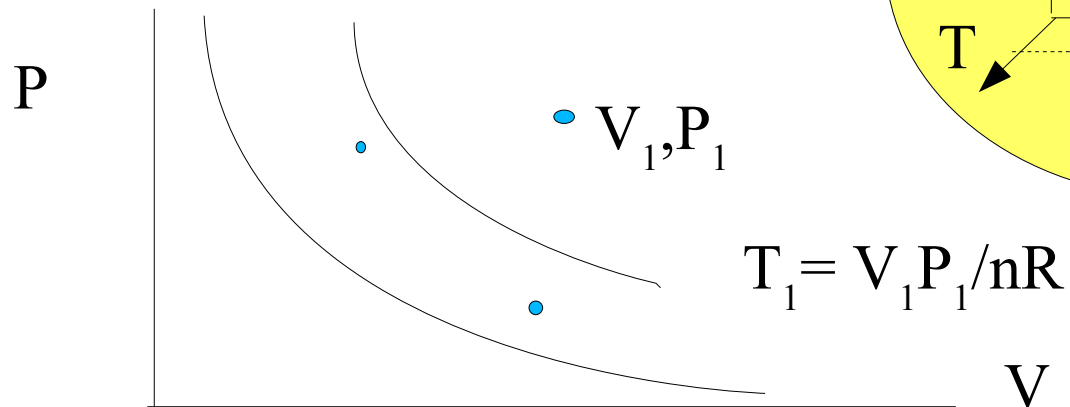


# Termodinamica

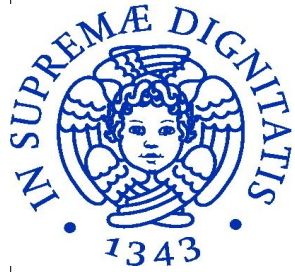
## Rappresentazione



### Piano di Clayperon



$Pv = nRT$  vale per stati in equilibrio termodinamico

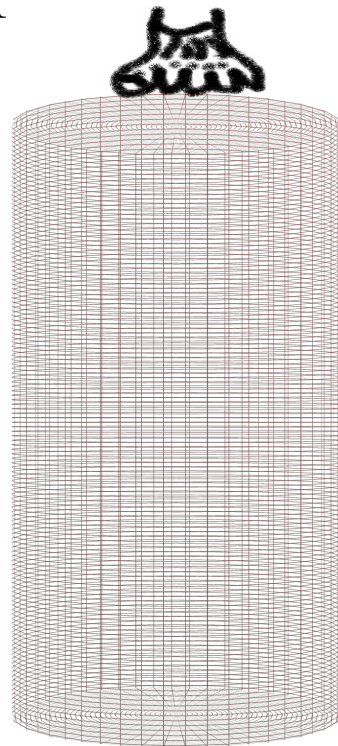


# Termodinamica

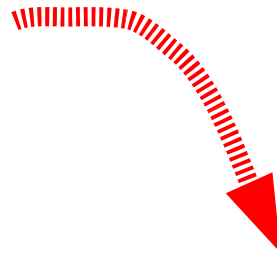
## trasformazioni



$V, P, T$

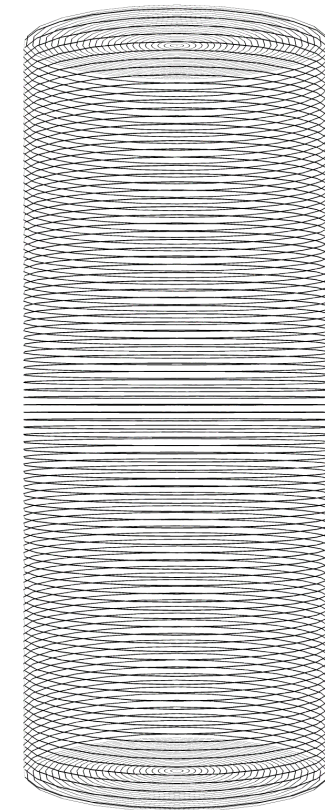
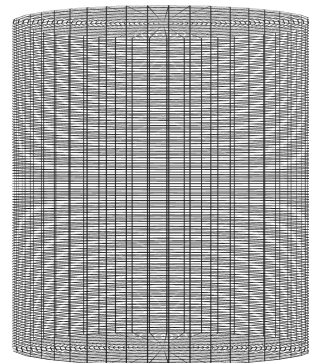


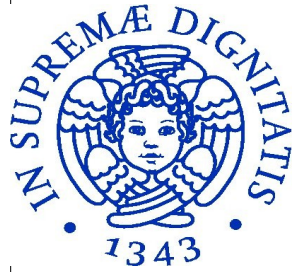
*cresce*



*diminuisce*

$V', P', T'$



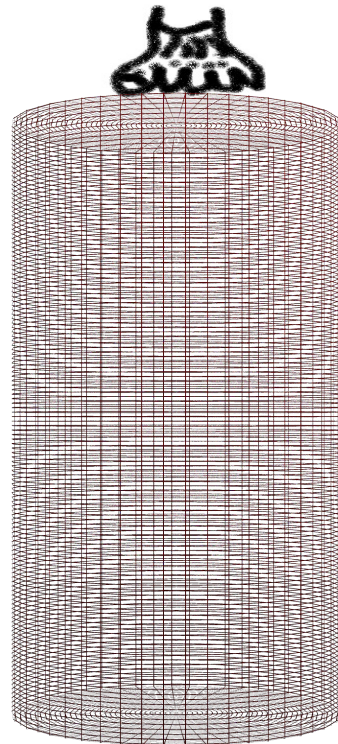


# Termodinamica

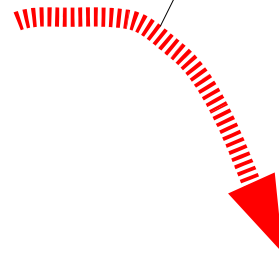
## trasformazioni



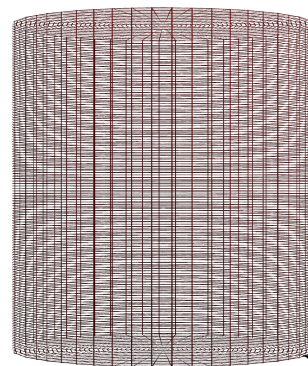
V,P,T



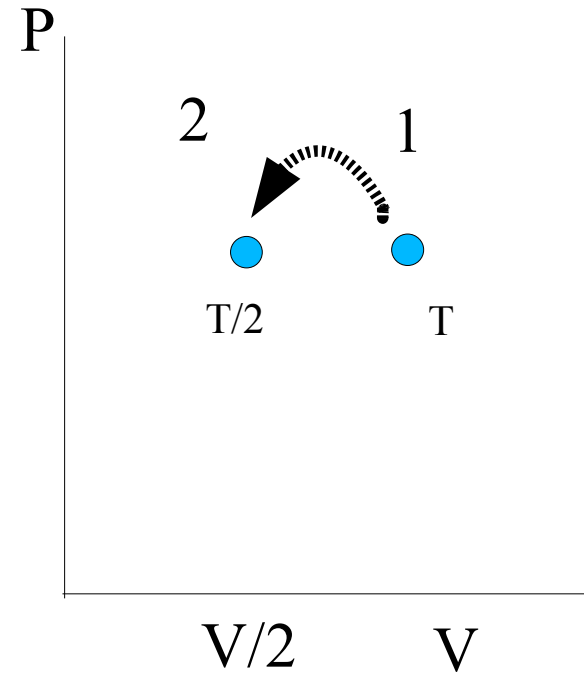
stati disomogenei

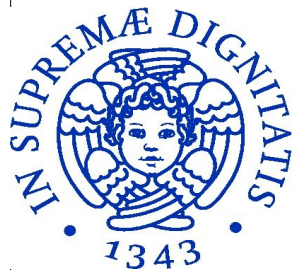


In frigo a  $T/2$  !



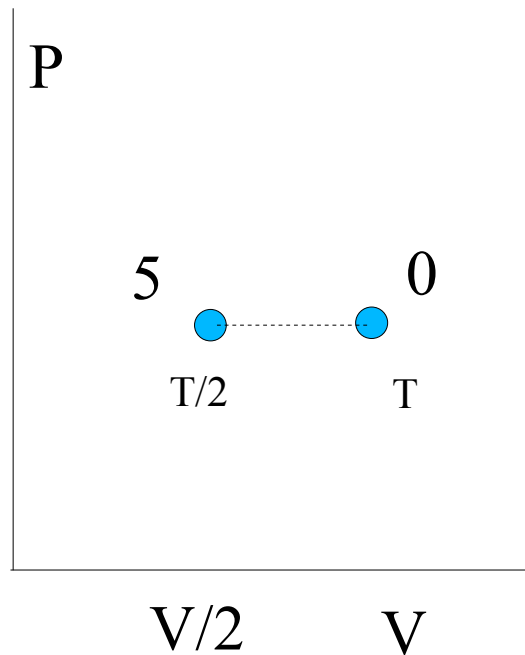
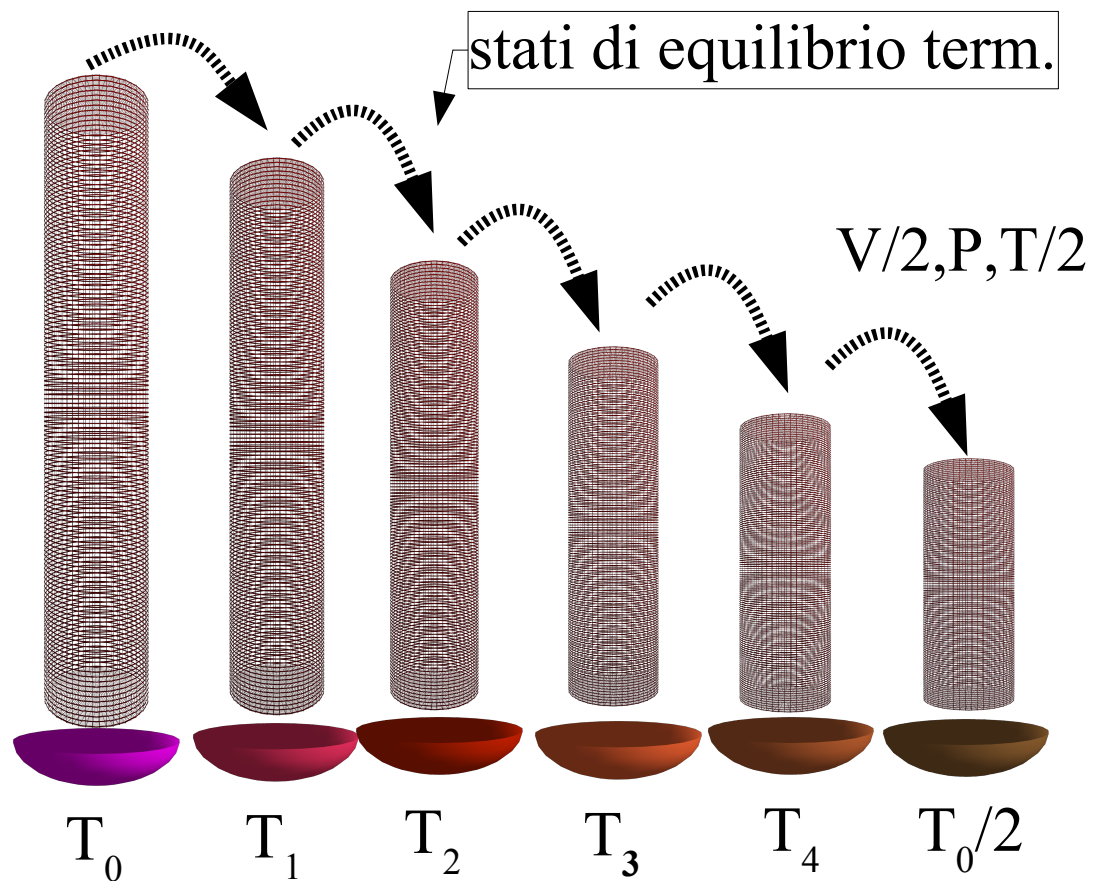
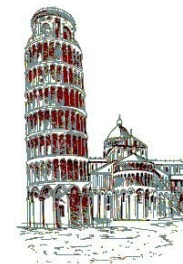
$V/2, P, T/2$

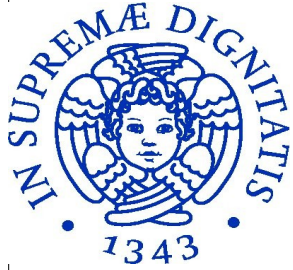




# Termodinamica

## trasformazioni





# Termodinamica

## trasformazioni

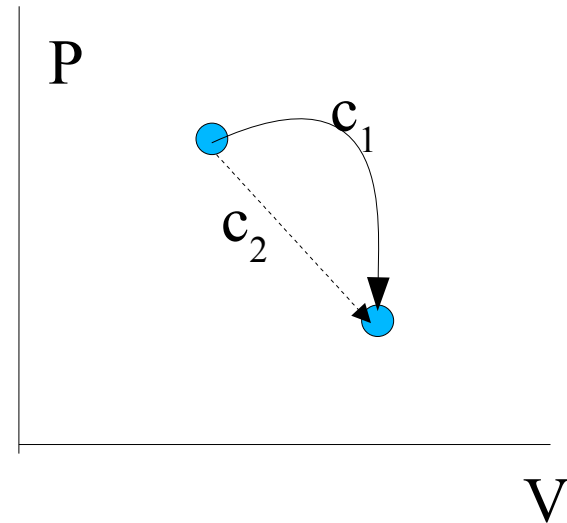


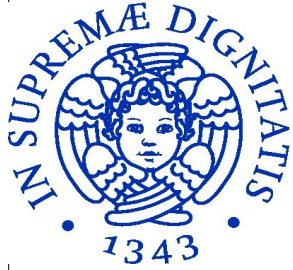
Attraverso stati di equilibrio

==> trasformazione **reversibile**  
*percorribile avanti e indietro*

Attraverso stati disomogenei

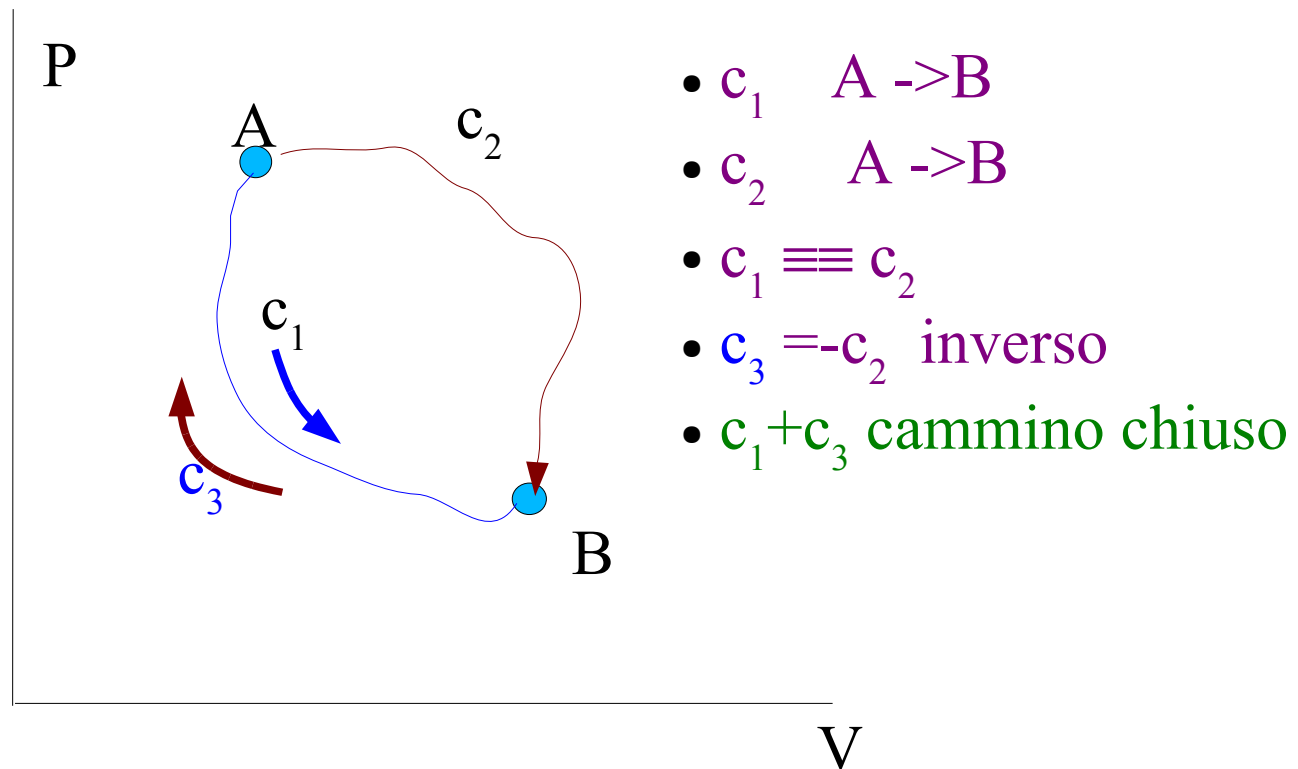
==> trasformazione **irreversibile**  
*non si sa come tornare indietro!*

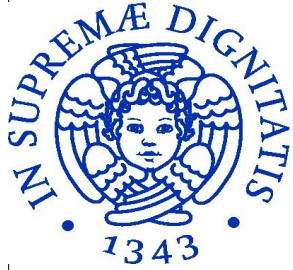




# Termodinamica

## trasformazioni





# Termodinamica

## trasformazioni

