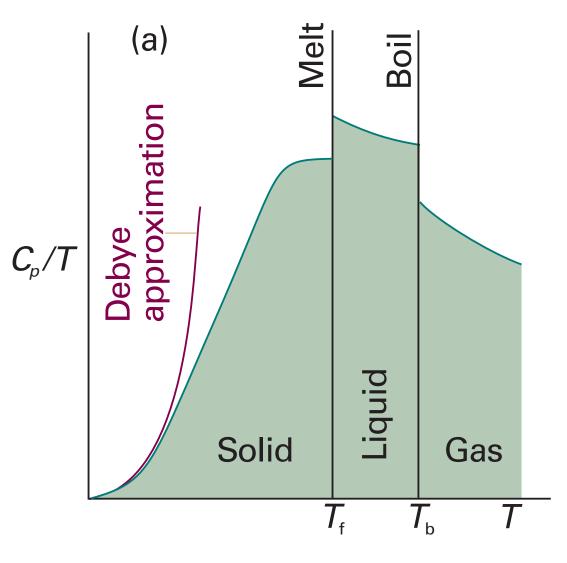
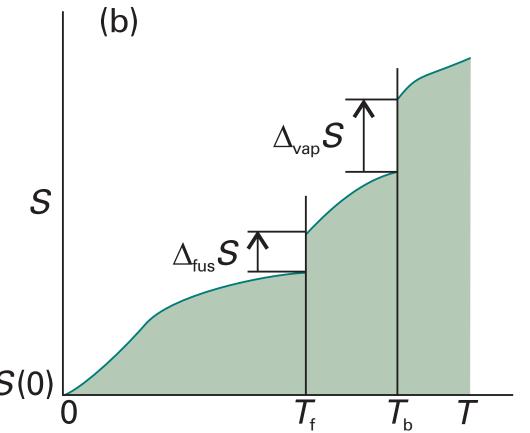
## Entropy of Boiling Liquid Nitrogen

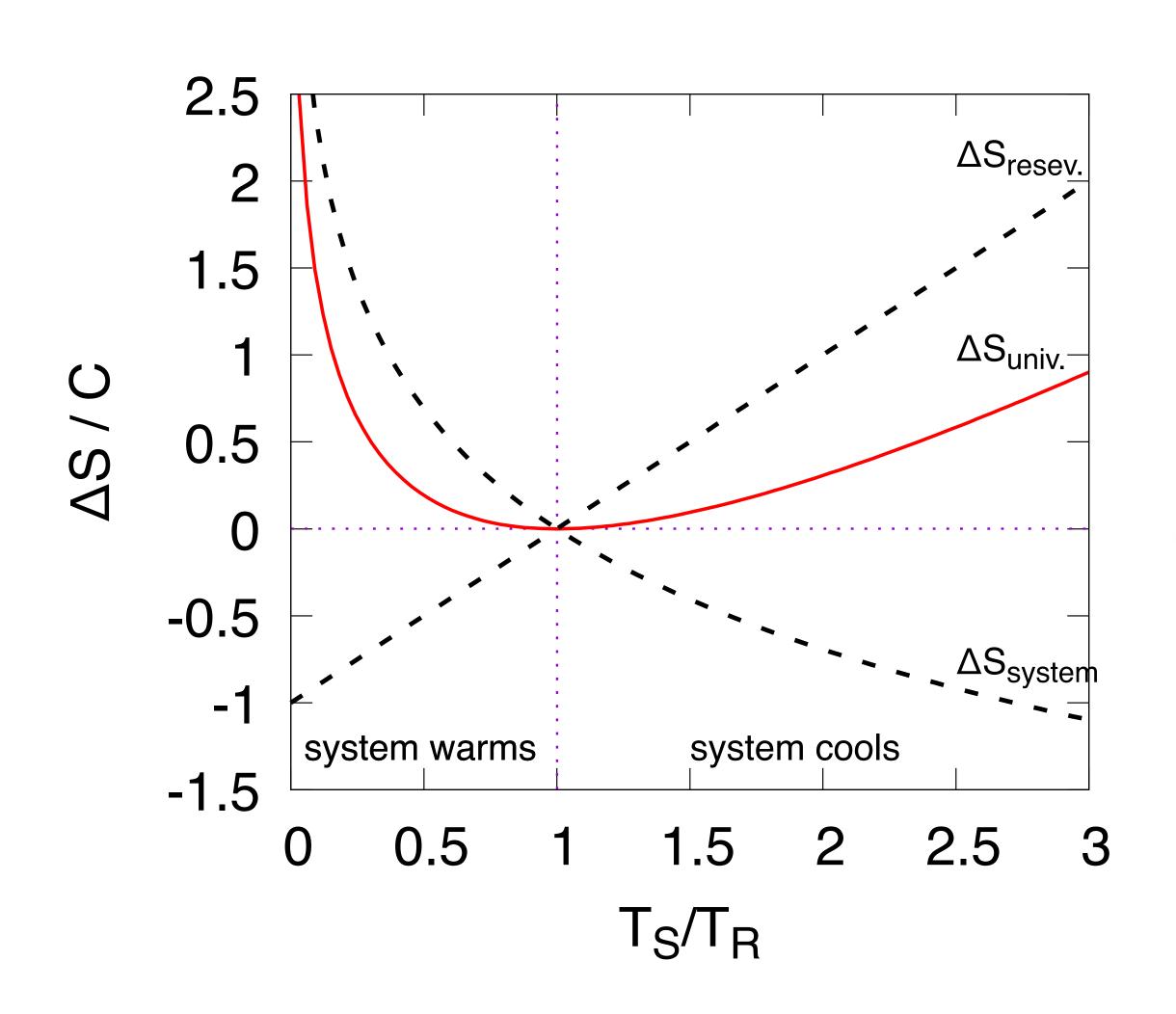




	$S_{\rm m}^{\bullet}/({\rm J}~{\rm K}^{-1}~{\rm mol}^{-1})$
Debye extrapolation	1.92
Integration, from 10 K to 35.61 K	25.25
Phase transition at 35.61 K	6.43
Integration, from 35.61 K to 63.14 K	23.38
Fusion at 63.14 K	11.42
Integration, from 63.14 K to 77.32 K	11.41

Total 79.8 J/mol K

## Change in Entropy Ball in Lake: Blundell Example 14.1



 $\mbox{Reservoir} = \mbox{Lake}$   $\mbox{The reservoir has constant temperature } T_R$ 

Universe is the ball and lake