Ideal Bose-Einstein gas: phase diagram

**\( D = 1 \)**

Transition at \( T \geq 0 \) and \( v = 0 \) (transition line = isochore).

**\( D = 3 \)**

Transition at \( T > 0 \) and \( v > 0 \).

**\( D = \infty \)**

Transition at \( T > 0 \) and \( v > 0 \) (transition line = isotherm).

\[
\begin{align*}
pv &= \begin{cases} 
  k_B T, & T > T_c \\
  0, & T < T_c 
\end{cases} \\
k_B T_c &= \Lambda = \frac{\hbar^2}{2\pi m}.
\end{align*}
\]