Three body phase space

\begin{align*}
  s_{34} & = m_{34}^2 \\
  s_{45} & = m_{45}^2
\end{align*}

Dalitz plot:

- Size of phase space directly related to $s_{12} = E_{cm}^2$
- Shape determined by masses $m_3, m_4, m_5$ of final state particles

Region:

- I: small $m_{34}^2$
- II: small $m_{45}^2$
- III: small $m_{55}^2$
- IV: all invariant masses high, $t_{23}, t_{15}$ small