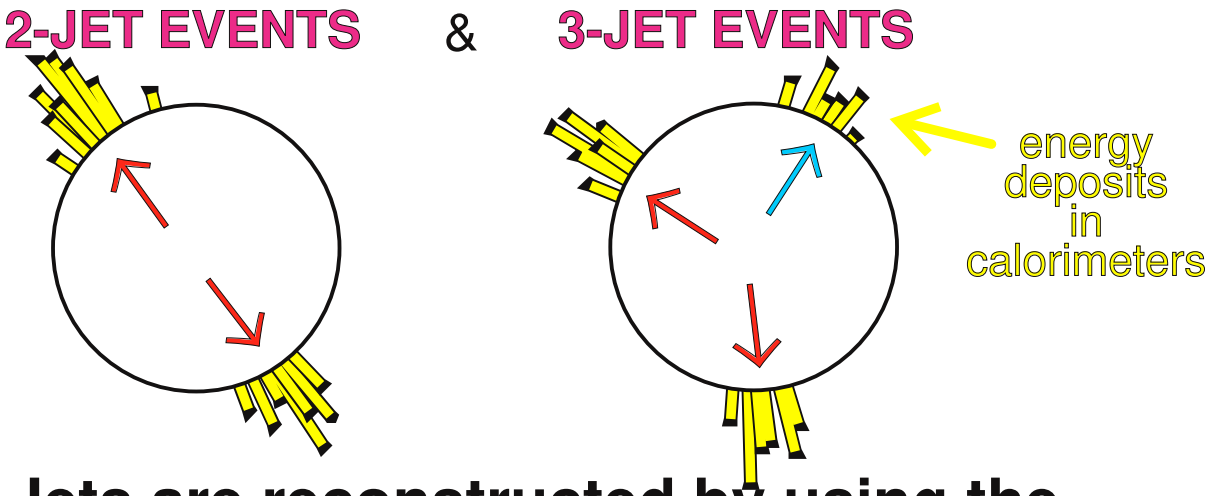
Jet reconstruction

We need to distinguish:



Jets are reconstructed by using the LUCLUS algorithm with d_{join}=5 GeV

$$d_{ij}=2\cdot\frac{E_i\cdot E_j\cdot\sin(\theta_{ij}/2)}{E_i+E_j} < 5 \text{ GeV}$$

where E_j are energy deposits in calorimeters

→ Events with more that 3 jets are called 3-Jet events

46% of events are three-jet events

Within three-jet events, the 72% of the less energetic jets are gluon-jets

→ Within three-jet events the two most energetic jets are called Quark jets and the less energetic jets are called Gluon jets

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