

implement Jet-Clustering with Georgi Algorithm

Jet function:

$$J_{\beta}(P_{\alpha}) \equiv E_{\alpha} - \beta \frac{P_{\alpha}^2}{E_{\alpha}} = E_{\alpha} [(1 - \beta) + \beta v_{\alpha}^2] ,$$

- ▶ one interesting feature: jet-clustering can be done **globally**
- ▶ main procedure: find the set of particles with maximum jet function
- ▶ number of combinations = 2^N , where N is number of particles to be clustered
- ▶ in most jet processes, it almost impossible to start with this algorithm at the beginning, based on **N= 100~150**
- ▶ luckily, now we more or less know the real starting point, **~ 20 mini-jets, which means ~ 1 million combinations**
- ▶ I'm trying to implement it...