1) identify $Z^0$ with $JDAHEP = 0$
   
   e.g., $I = 10, JDAHEP = \{26, 35\}$

2) go to $I = 26 \sim 36$ and check $JMOHEP$.
   
   e.g., $JMOHEP = \{8, 0\}$ or $\{9, 0\}$

3) check if $I = 8$ is one of quarks
   check if $I = 9$ is one of quarks

   ↓

   if yes, keep the 4-momenta of 8 and 9.

4) go back to $I = 26 \sim 36$ and check $JDAHEP$
   
   e.g., $JDAHEP = \{69, 69\}$ for $I = 26 \sim 36$

5) go to $I = 69$ and check $JDAHEP$
   
   also see if $I = 69$ is "gen. code."
   
   e.g., $JDAHEP = \{70, 86\}$

6) trace each of $I = 70 \sim 86$ until it reaches to final stable particles ($JDAHEP = \{0, 0\}$);
   make a list of final particles.

7) separate the particles in Step 6 into 2 groups by checking the momentum direction with 8 or 9.
7) (cont'd)

\[ Z^0 \to b \bar{b} \]
\[ b \to 26 \sim 27 \sim 30 \]
\[ \bar{b} \to 31 \sim 34 \sim 35 \]

Final state particles:

Some final-state particles may be outside the cone. \( \Delta R = 0.4 \) cone