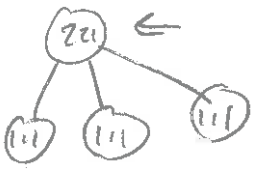


choose the first combo $[N_1\ N_2\ N_3\ N_4\ N_5\ N_6]$

are 221's children leaves? none of them are, so make no flags

→ move down to left 111

array states

$\omega: [N_1\ N_2\ N_3\ N_4\ N_5\ N_6\ N_7]$

$\eta: [N_1\ N_2\ N_3\ N_4\ N_5\ N_6\ ]$

*1 $\pi^0: [X\ X]$

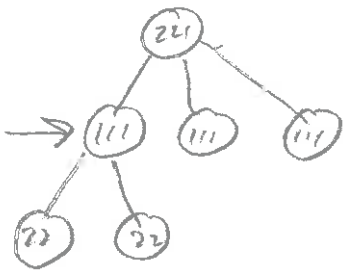
*2 $\pi^0: [X\ X]$

*3 $\pi^0: [X\ X]$

used

$[N_1\ N_2\ N_3\ N_4\ N_5\ N_6\ N_7]$

$[0\ 0\ 0\ 0\ 0\ 0\ 0]$



> get 111's leaves → [22, 22]

> generate all combos of unused particles

> choose from η selected combo. $\binom{6}{2} = 15$

$[N_1\ N_2]$
$[N_1\ N_3]$
$[N_1\ N_4]$
⋮

Select 1 combination $[N_1\ N_2]$

is 111's children leaves? yes mark used

→ move to 22's ... these are leaves so we recurse back out to the middle 111

array states

$\omega: [N_1\ N_2\ N_3\ N_4\ N_5\ N_6\ N_7]$

$\eta: [N_1\ N_2\ N_3\ N_4\ N_5\ N_6]$

*1 $\pi^0: [N_1\ N_2]$

*2 $\pi^0: [X\ X]$ *3 $\pi^0: [X\ X]$

flags used

$[N_1\ N_2\ N_3\ N_4\ N_5\ N_6\ N_7]$

$[1\ 1\ 0\ 0\ 0\ 0\ 0]$