

MUON MC PROVENANCE

GENERAL: SIGN MEANS MUON (+) OR ANTIMUON (-)

- 0 FAKE (RECO MUON HAS NO GEN PARTICLE ASSOCIATED TO IT)
- 1 NOT ASSIGNED
- 2 NOT ASSIGNED
- 3 DIF (LONG RANGE)
- 4 DIF (SHORT RANGE)
- 5 PUNCH THROUGH (RECO MUON IS ASSOCIATED TO A GENERATED HADRON)
- 6 POSSIBLE FAKE OR PUNCH THROUGH (MC ASSOCIATION DOES NOT GIVE ENOUGH INFORMATION)
- 7 MIS-RECONSTRUCTED (INNER TRACK AND OUTER TRACK ARE ASSOCIATED TO TWO UNRELATED GENPARTICLES)
- 8 NOT ASSIGNED
- 9 PION DIF COMING FROM B
- 10 PION DIF COMING FROM C
- 11 PION DIF COMING FROM LIGHT FLAVOR
- 12 KAON DIF COMING FROM B
- 13 KAON DIF COMING FROM C
- 14 KAON DIF COMING FROM LIGHT FLAVOR
- 15 B TO C TO MUON (NO MIXING)
- 16 B TO C TO MUON (WITH MIXING)
- 17 B TO MUON (NO MIXING)
- 18 B TO MUON (WITH MIXING)
- 19 B TO HADRON RESONANCE TO MUON
- 20 B TO C TO TAU TO MUON (NO MIXING)
- 21 B TO C TO TAU TO MUON (WITH MIXING)
- 22 B TO TAU TO MUON (NO MIXING)
- 23 B TO TAU TO MUON (WITH MIXING)
- 24 C TO MUON
- 25 PROMPT

SIMPLIFIED IP CODE

- 0 FAKES
- 1 B (INCLUDING SEQUENTIALS)
- 2 DIRECT C
- 3 PROMPT
- 4 PION DECAYS IN FLIGHT
- 5 KAON DECAYS IN FLIGHT
- 6 PUNCH-THROUGH

SIMPLIFIED MERGED IP CODE

- 0 FAKES
- 1 B (INCLUDING SEQUENTIALS)
- 2 DIRECT C
- 3 PROMPT
- 4 PION AND KAON DECAYS IN FLIGHT
- 5 PUNCH-THROUGH

SIMPLIFIED PtREL CODE

- 0 FAKES
- 1 DIRECT B (NO SEQUENTIALS)
- 2 DIRECT C
- 3 PROMPT
- 4 PION AND KAON DECAYS IN FLIGHT
- 5 B TO C TO MUON (SEQUENTIALS!)
- 6 PUNCH-THROUGH

SIMPLIFIED MERGED PtREL CODE V0

- 0 FAKES
- 1 DIRECT B (NO SEQUENTIALS)
- 2 DIRECT C AND PION AND KAON DECAYS IN FLIGHT
- 3 PROMPT
- 4 B TO C TO MUON (SEQUENTIALS!)
- 5 PUNCH-THROUGH

SIMPLIFIED MERGED PtREL CODE V1

- 0 (NOT ASSIGNED)
- 1 DIRECT B (NO SEQUENTIALS)
- 2 B TO C TO MUON (SEQUENTIALS!)
- 3 DIRECT C AND PION AND KAON DECAYS IN FLIGHT AND PROMPT AND FAKES AND PUNCH-THROUGH