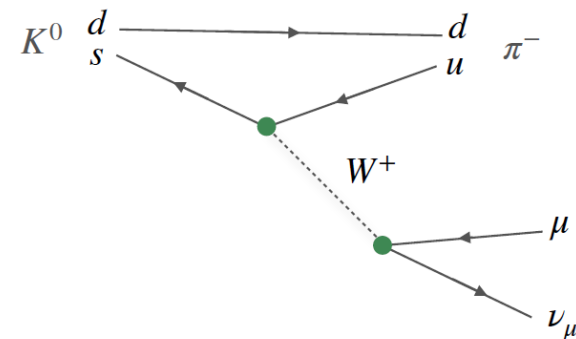
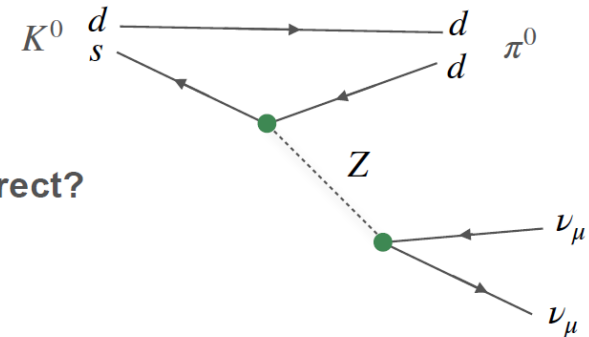


## Warm-up question 1

Which statement about the diagrams on the right is correct?

- A) Both processes are valid.
- B) The processes are both not valid because the strangeness is not conserved.
- C) Quark mixing is part only of the W interaction. The upper diagram is not valid.
- D) The charge is not conserved in the lower process. Only the upper diagram is valid.



## Warm-up question 2

The diagonal elements of the CKM matrix are almost equal to 1...

- A) Because the W-boson couples preferentially between particles of the same generation.
- B) Because the W-boson couples preferentially between particles of the different generation.
- C) Because the W-boson couples preferentially between particles of the different charge
- D) Because the CKM matrix must be hermitian
- E) Because the CKM matrix must be unitarian