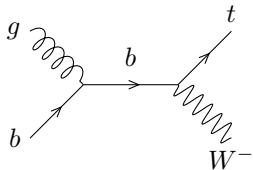
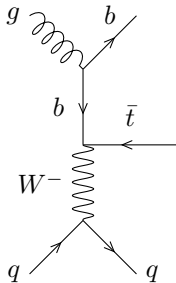


(a) Single top production from s-channel



(b) Single top production in association with a W Boson



(c) Single top production from t-channel