Software Review: Update
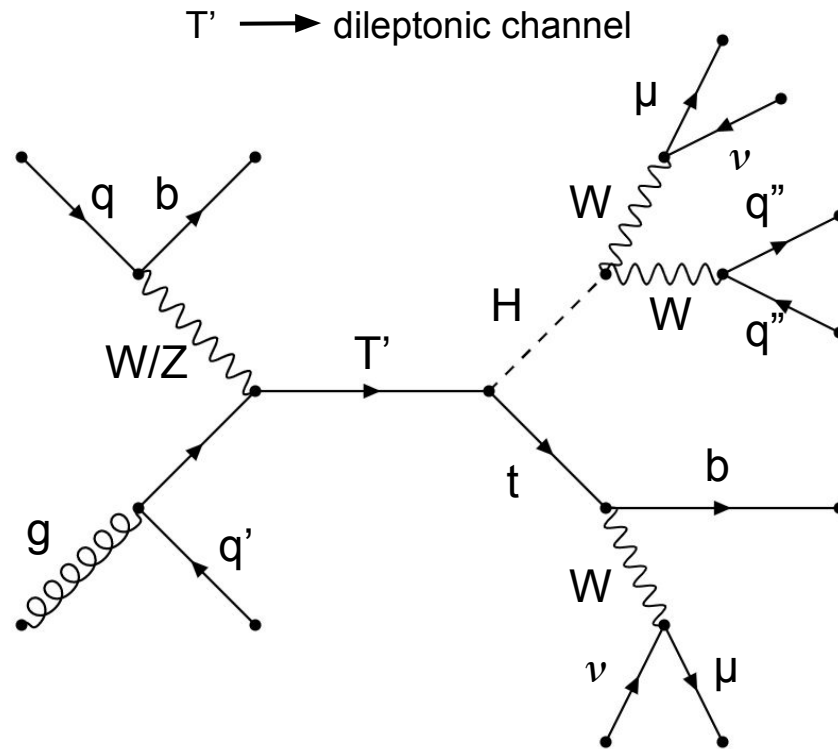
1 July 2022
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Basic selection: 2 loose Muons with Pt > 10 GeV, |η| < 2.4 and loose isolation + 2 tight SS Muons with Pt > 20 GeV, |η| < 2.4, tight isolation and sip_3d < 3.

To remove the ttW, one can try to construct the invariant mass of 3 jets among all the jets, and select the closest value to the top mass (172.9 GeV). The signal is matched to the Generator information.

Process	Mass window	Efficiency
Signal	172.9 +/- 8.5 GeV	86%
	172.9 +/- 17 GeV	81%
	172.9 +/- 25.5 GeV	78%
	172.9 +/- 34 GeV	75%
ttW	172.9 +/- 8.5 GeV	74%
	172.9 +/- 17 GeV	61%
	172.9 +/- 25.5 GeV	53%
	172.9 +/- 34 GeV	47%

Need to ask for at least one b-jet among the 3 jets!