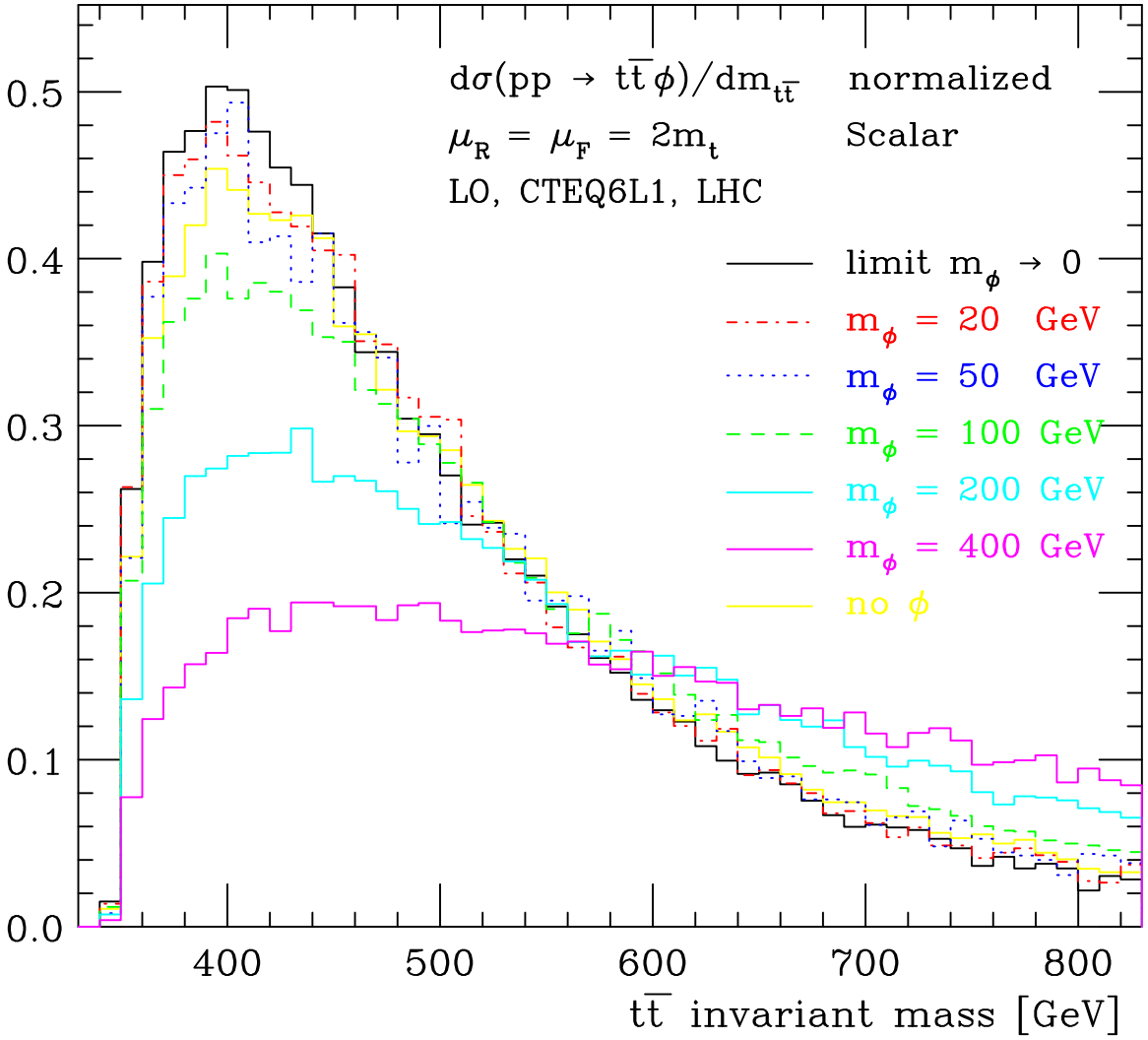
dσ(pp → tt̄φ)/dm_tt̄
normalized
μ_R = μ_F = 2m_t
Scalar
LO, CTEQ6L1, LHC
limit m_φ → 0
m_φ = 20 GeV
m_φ = 50 GeV
m_φ = 100 GeV
m_φ = 200 GeV
m_φ = 400 GeV
no φ
0.0
0.1
0.2
0.3
0.4
0.5
400
500
600
700
800
tt̄ invariant mass [GeV]