

List of cuts :

Inclusive

- ◆ $Q^2 > 1$
- ◆ $0.004 < x < 0.4$
- ◆ $0.1 < y < 0.7$
- ◆ $5 < W < 17$

Semi-Inclusive

- ◆ $XX0 < 15$
- ◆ $3 < p_h < 40$
- ◆ $0.01 < \theta_h < 0.12$
- ◆ $X_{RICH}^2 + y_{RICH}^2 > 25$

Comparison of P09 (t2, full) with MC w/ Django and P09 beam file

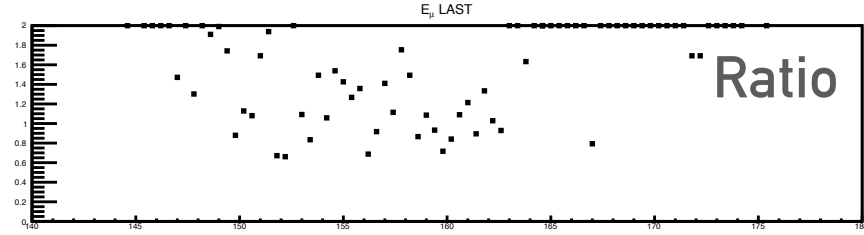
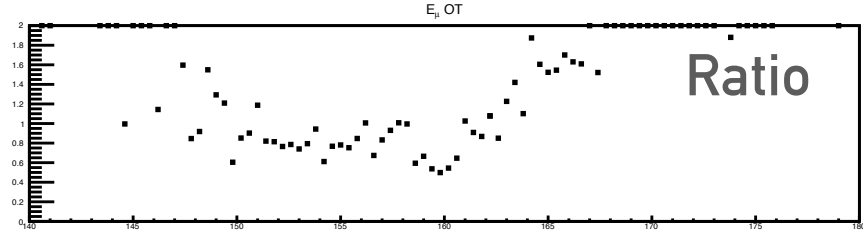
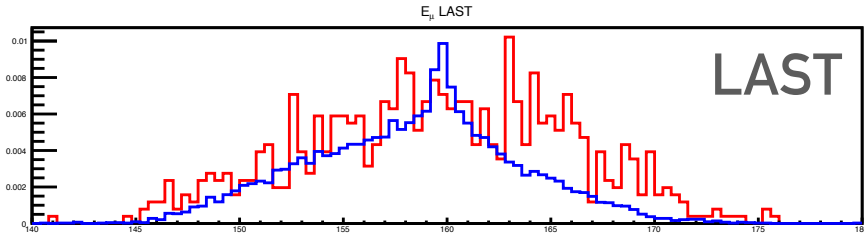
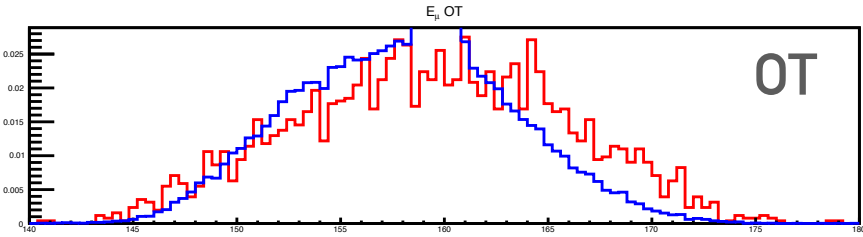
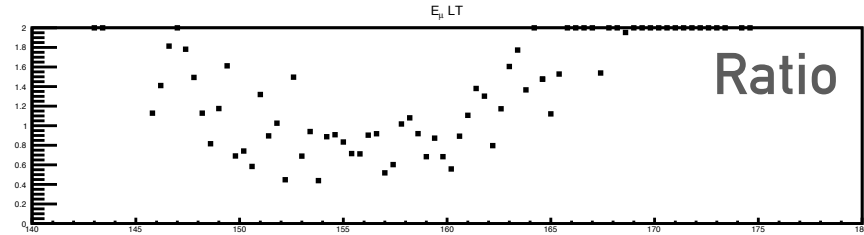
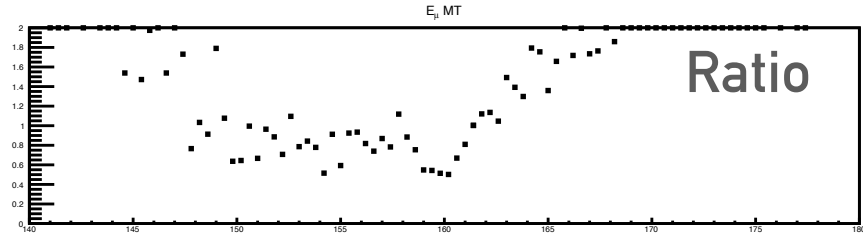
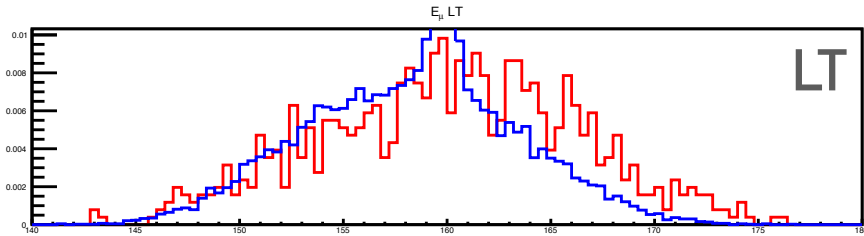
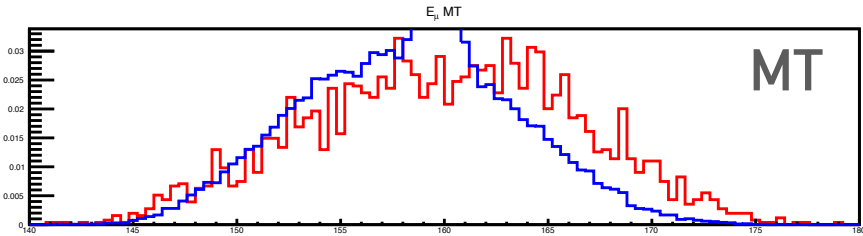
Django w/ inelastic and (quasi-)elastic radiative corrections.
(Corrected a bug : was no gen of final state for (q)el events..)

DJANGO : COMPARISON RD/MC

E_{μ}

— RD — MC

Normalized over OT events

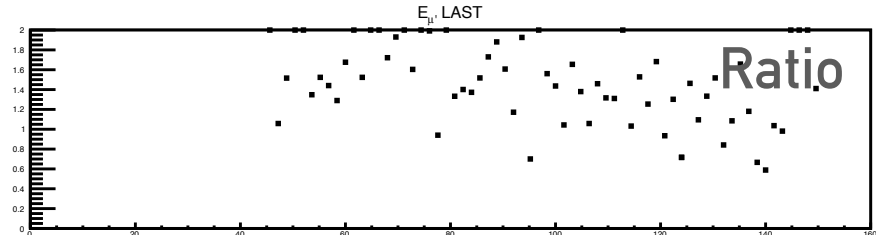
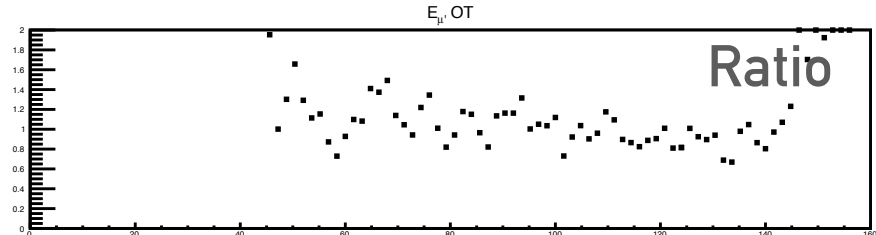
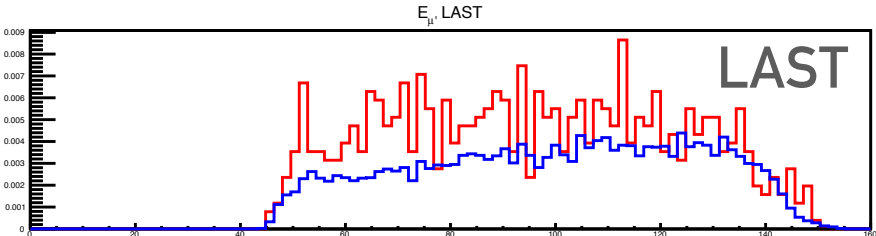
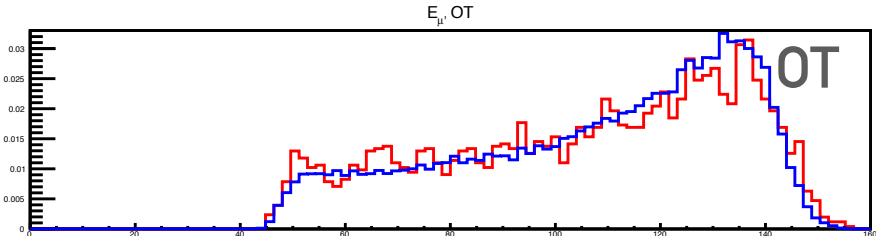
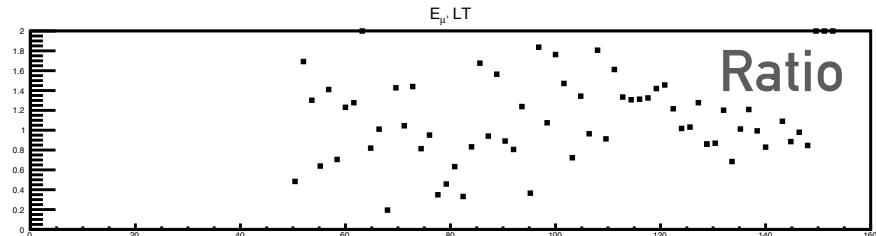
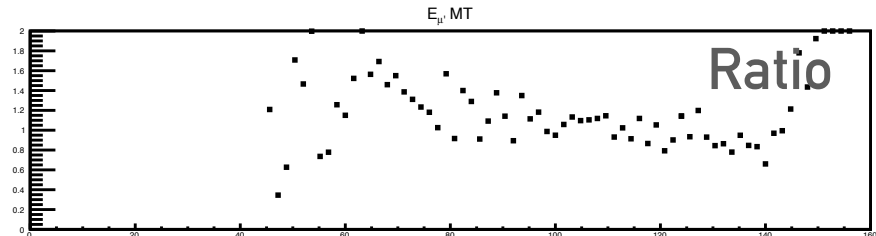
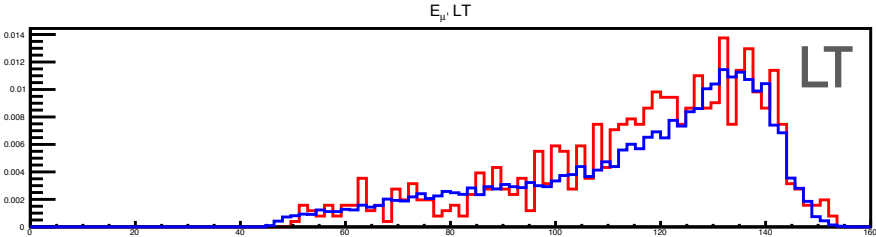
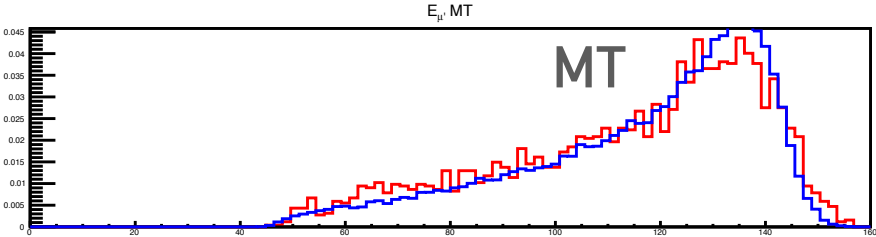


DJANGO : COMPARISON RD/MC

$E_{\mu'}$

— RD — MC

Normalized over OT events

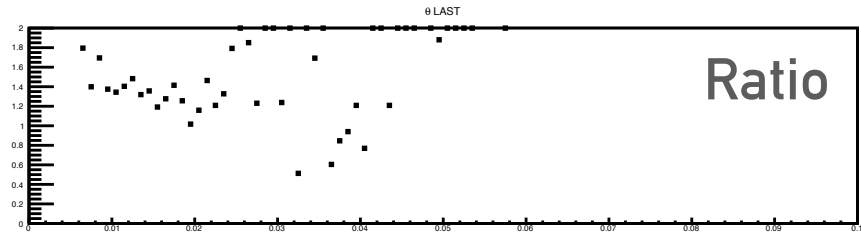
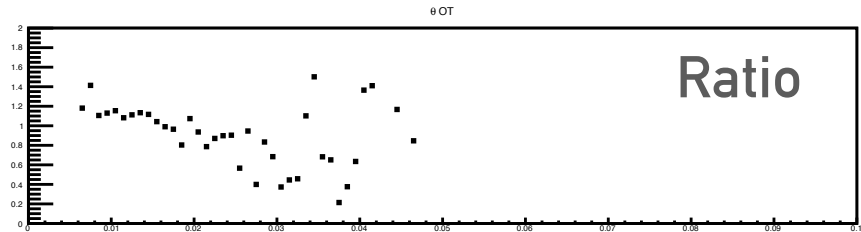
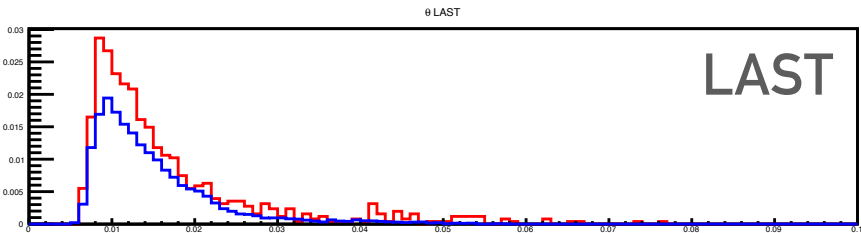
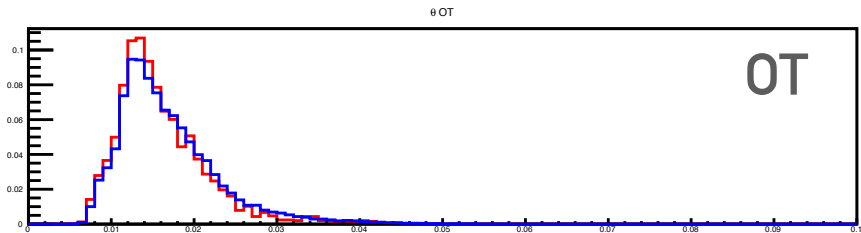
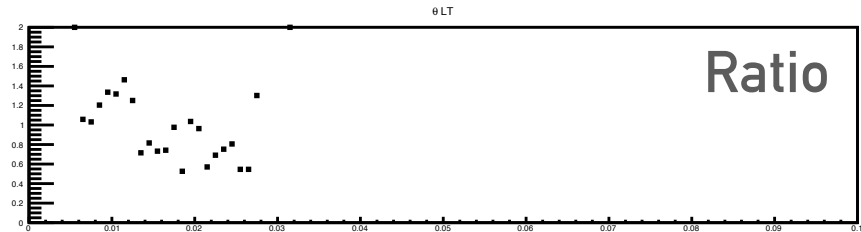
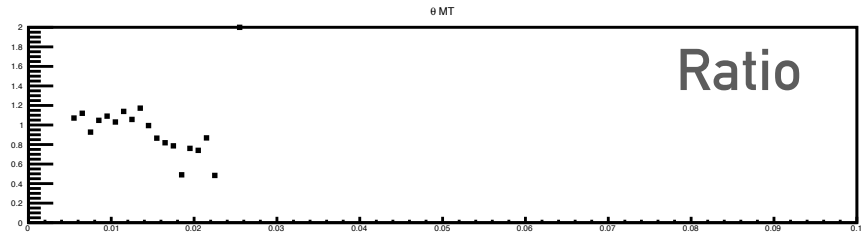
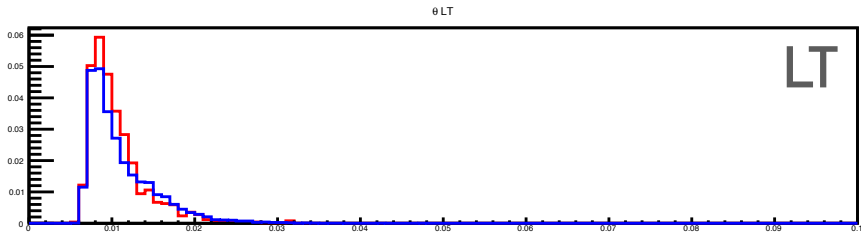
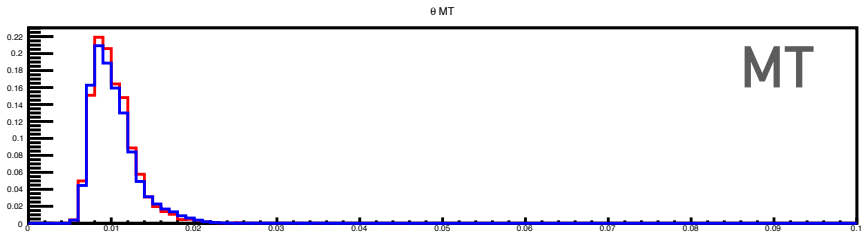


DJANGO : COMPARISON RD/MC

θ

— RD — MC

Normalized over OT events

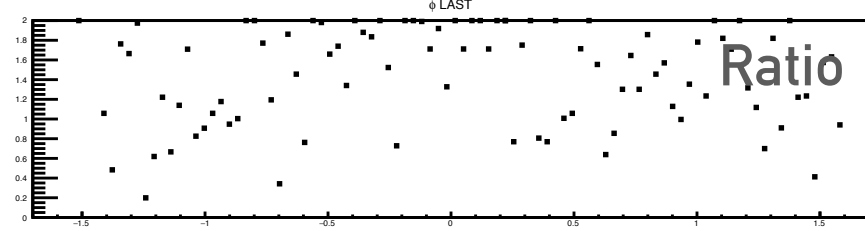
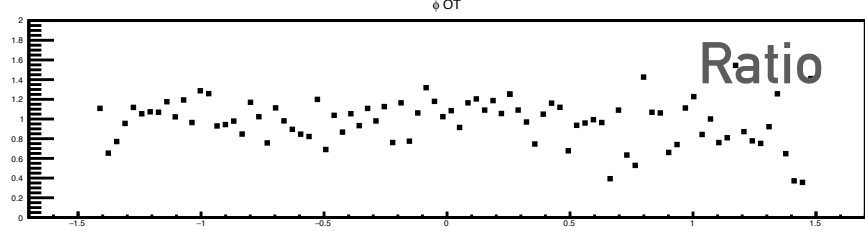
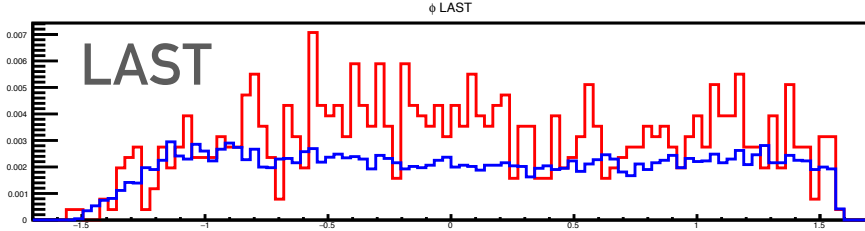
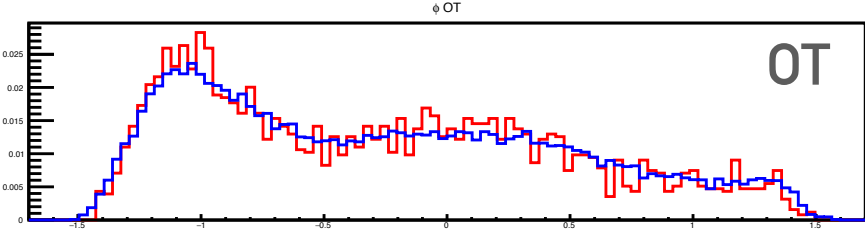
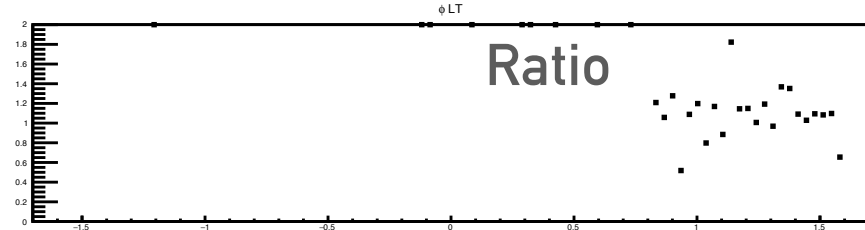
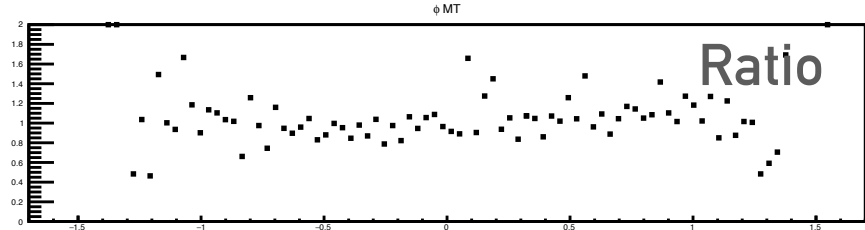
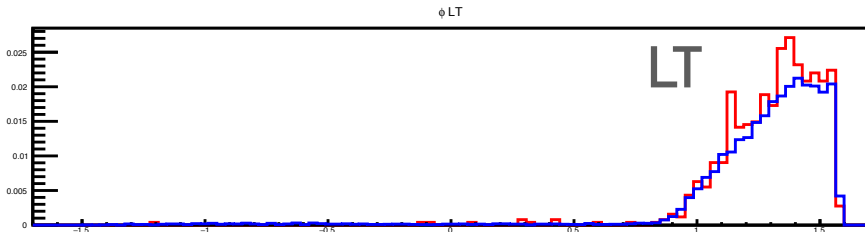
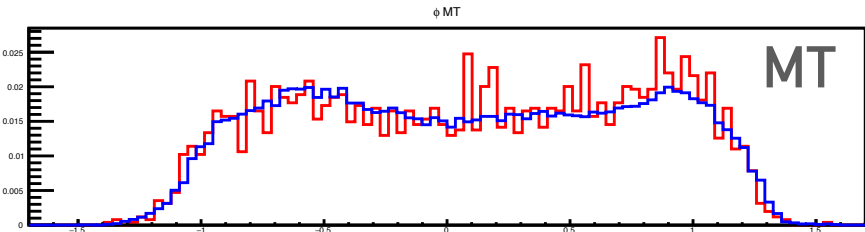


DJANGO : COMPARISON RD/MC

Φ

— RD — MC

Normalized over OT events

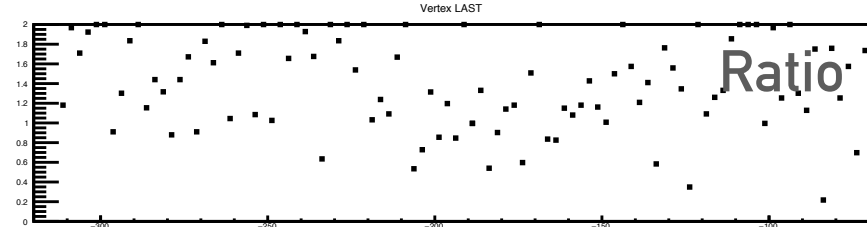
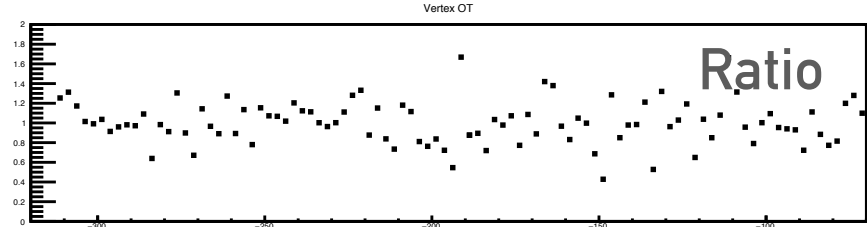
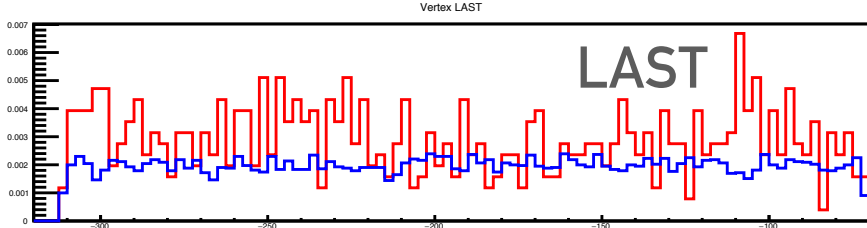
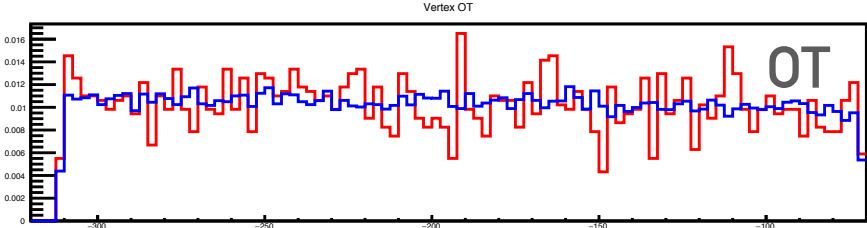
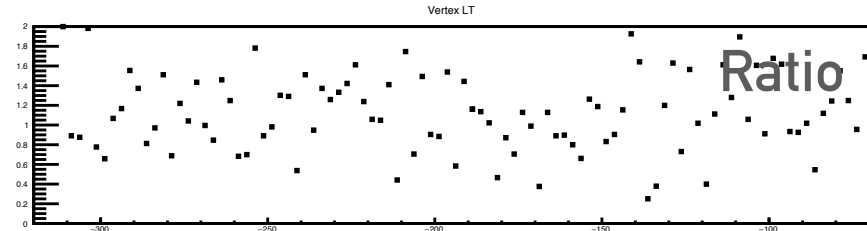
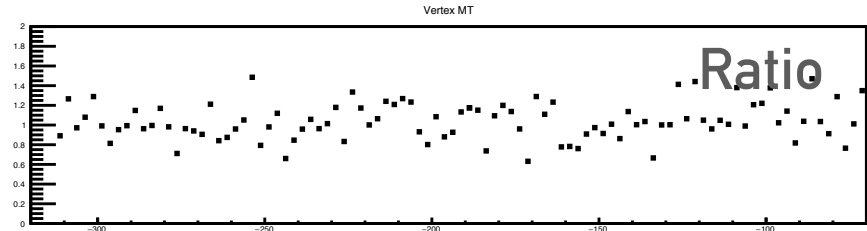
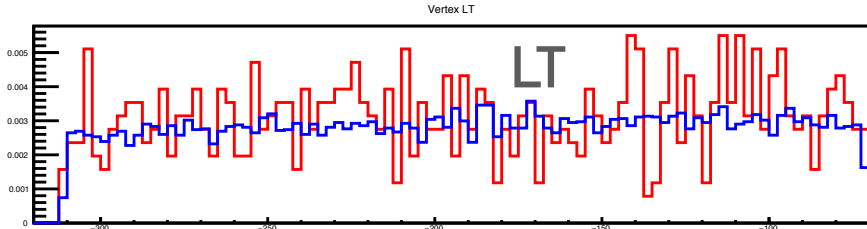
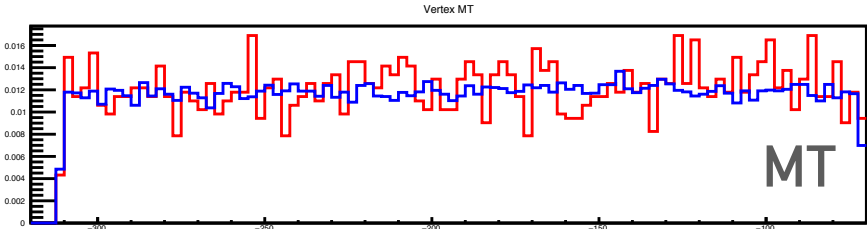


DJANGO : COMPARISON RD/MC

Vertex distribution (z)

— RD — MC

Normalized over OT events

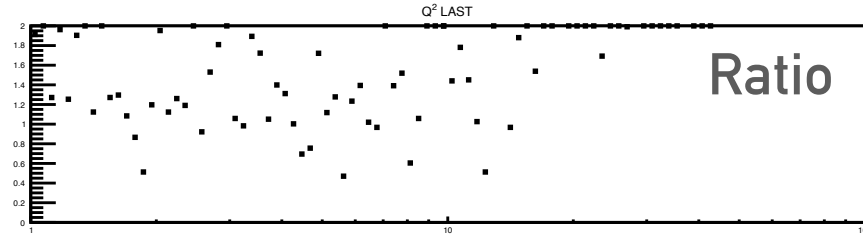
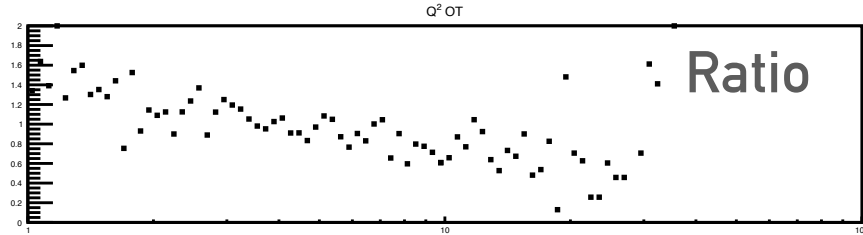
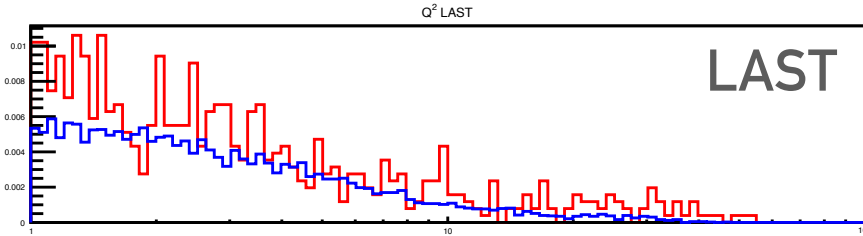
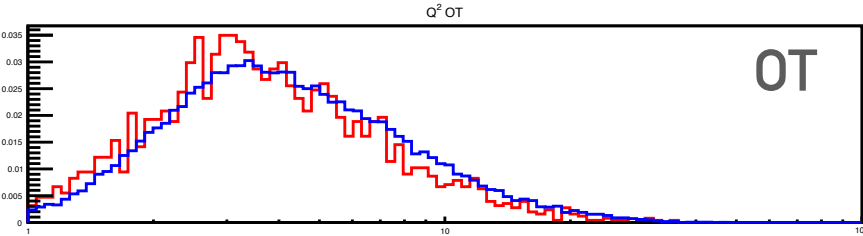
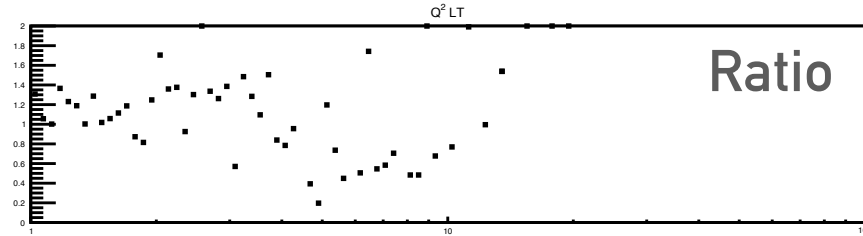
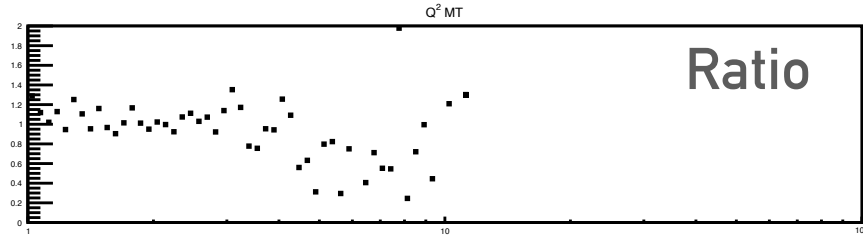
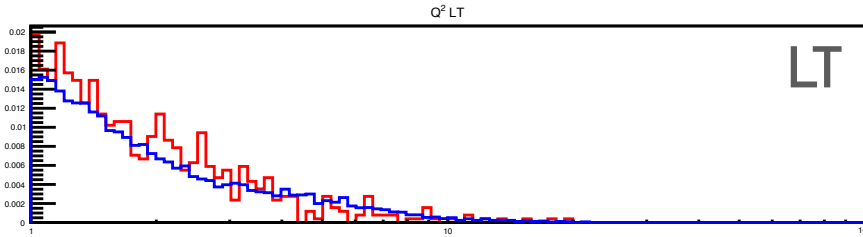
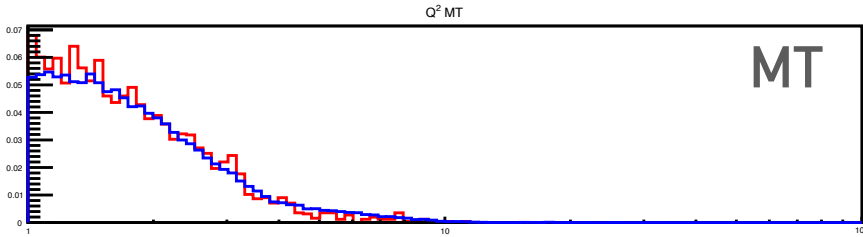


DJANGO: COMPARISON RD/MC

Q²

— RD — MC

Normalized over OT events



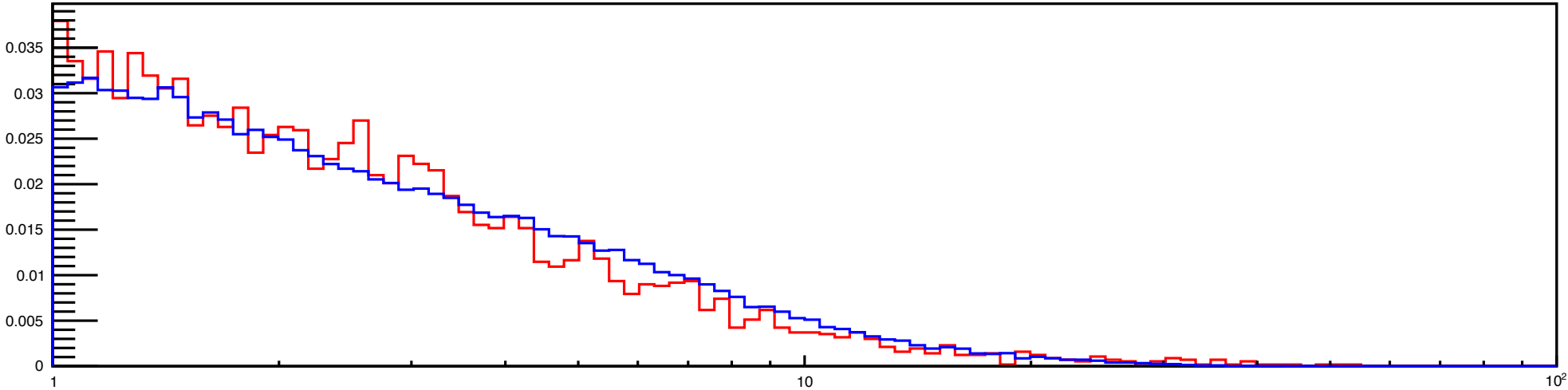
DJANGO : COMPARISON RD/MC

Q²

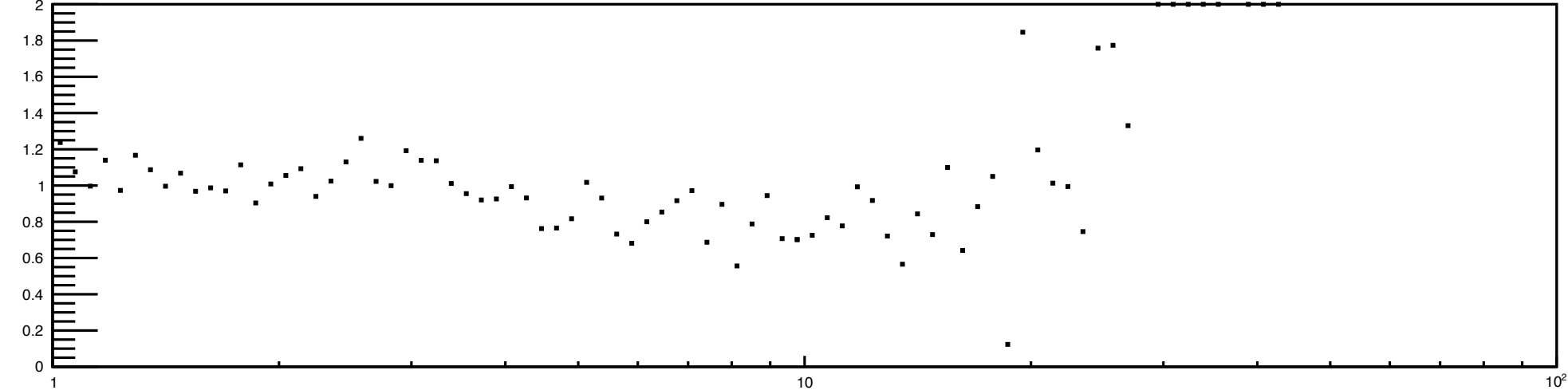
RD MC

All triggers

Q² All Trig



Q² All Trig

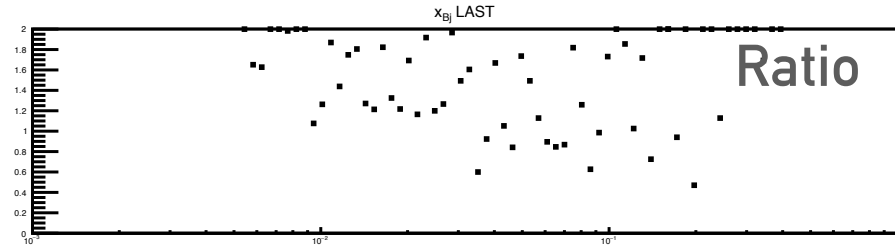
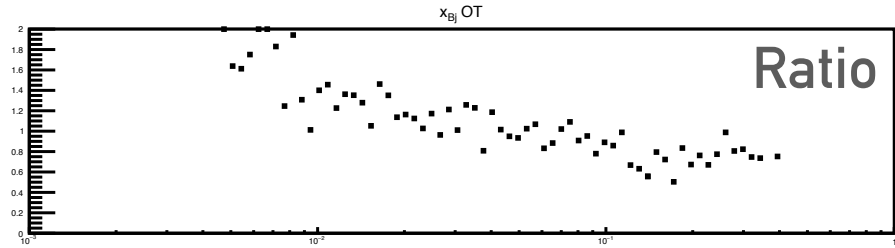
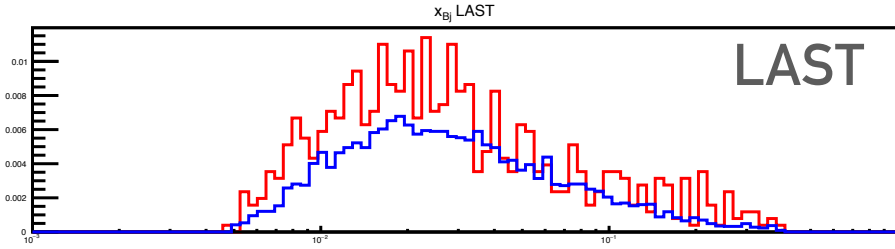
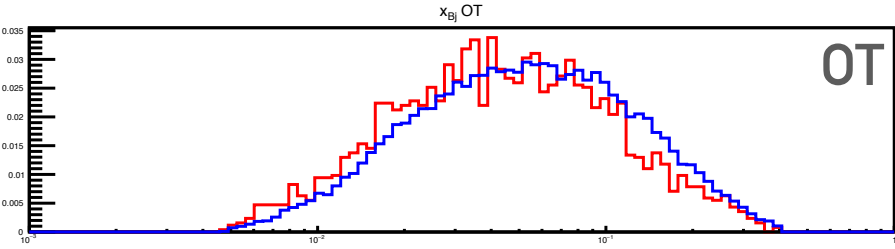
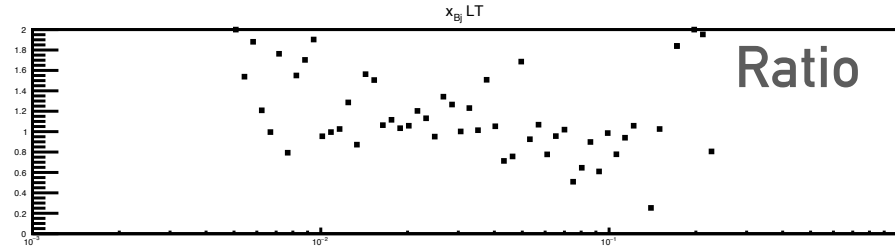
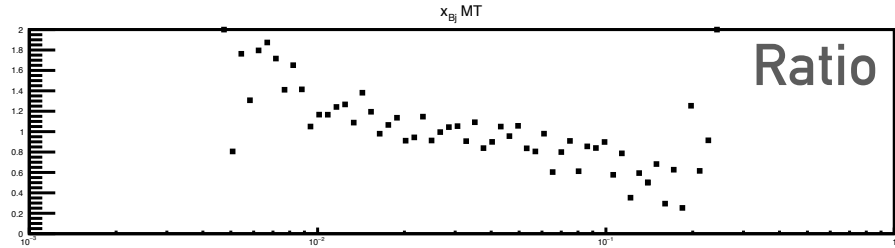
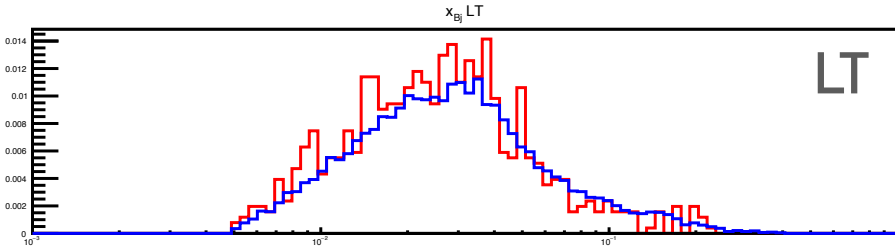
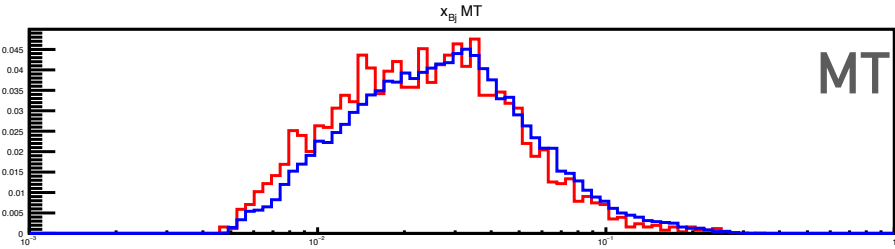


DJANGO : COMPARISON RD/MC

X_{Bj}

— RD — MC

Normalized over OT events



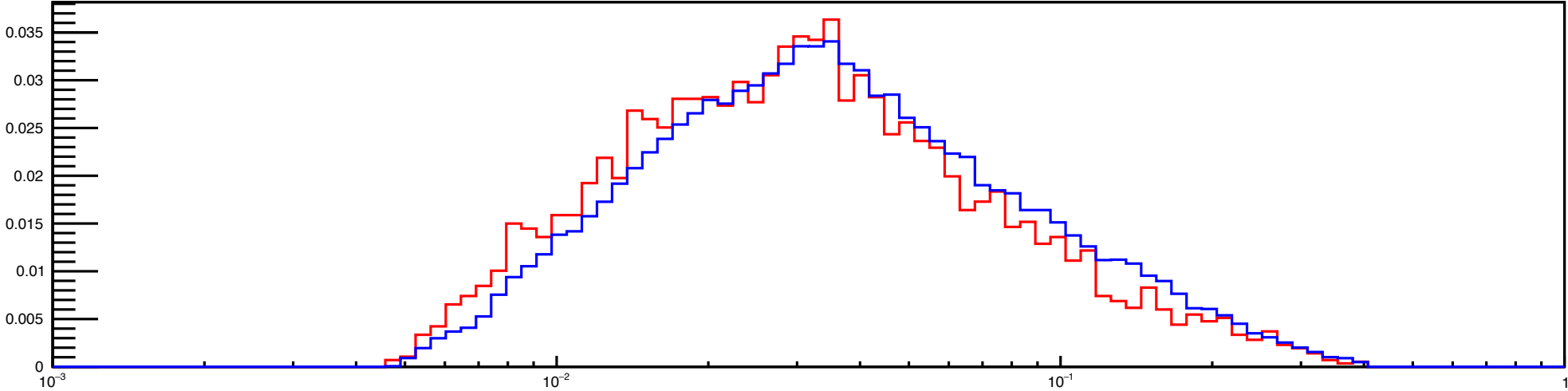
DJANGO : COMPARISON RD/MC

x_{Bj}

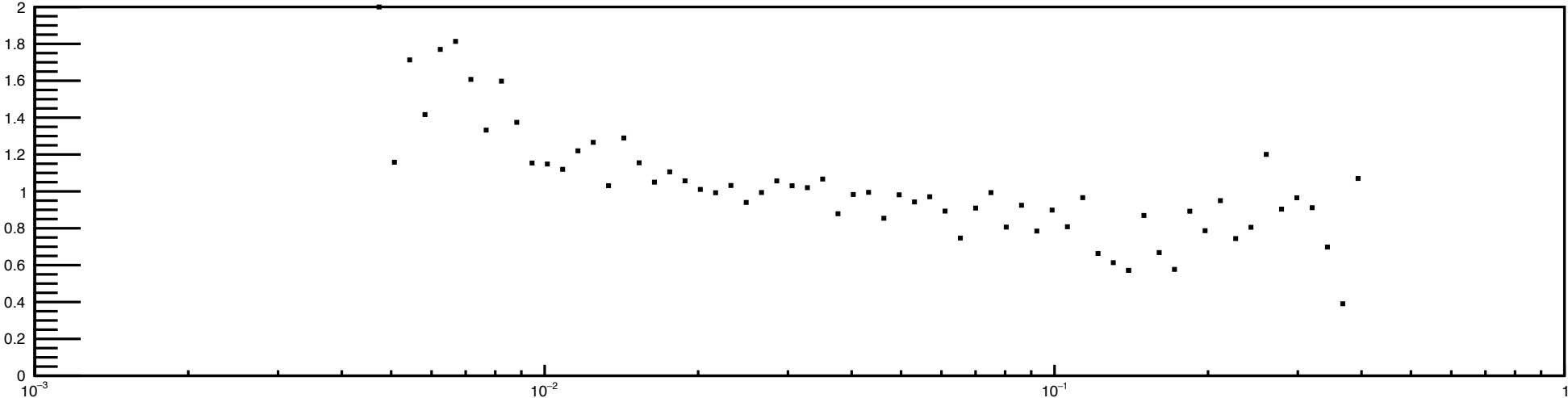
RD MC

All triggers

x_{Bj} All Trig



x_{Bj} All Trig

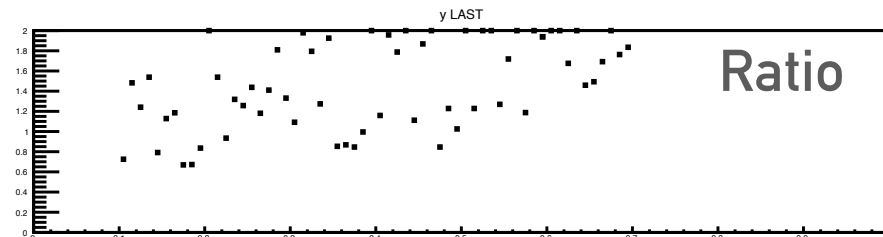
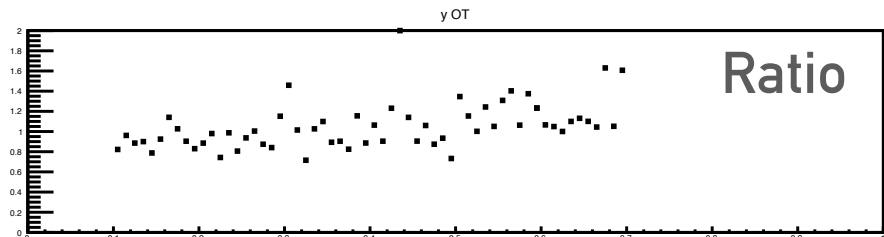
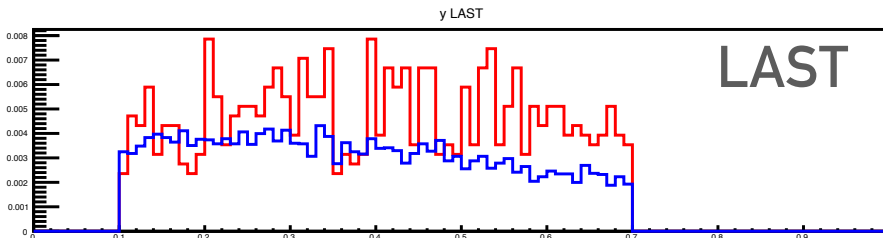
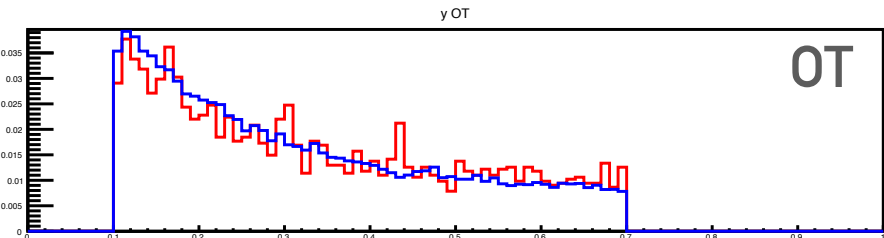
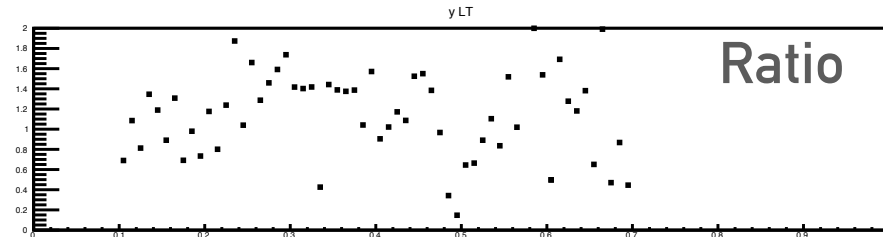
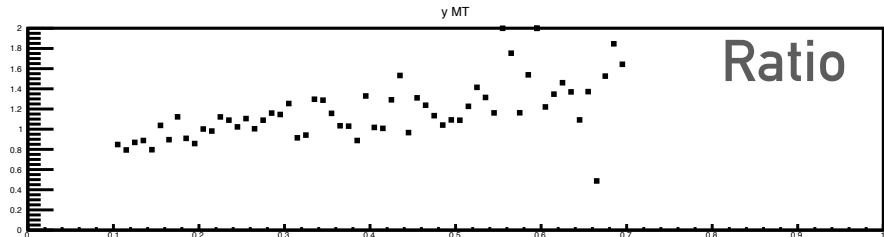
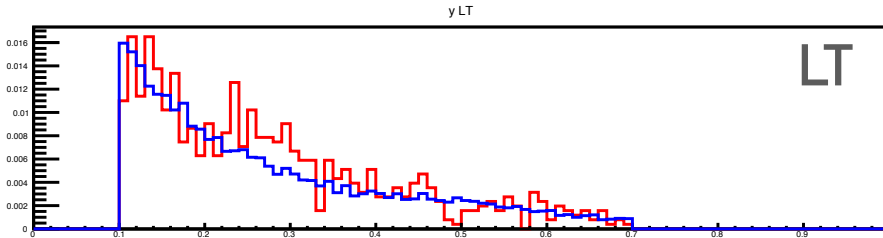
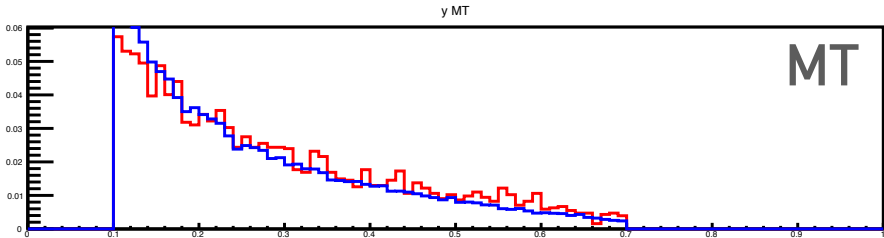


DJANGO : COMPARISON RD/MC

y

— RD — MC

Normalized over OT events



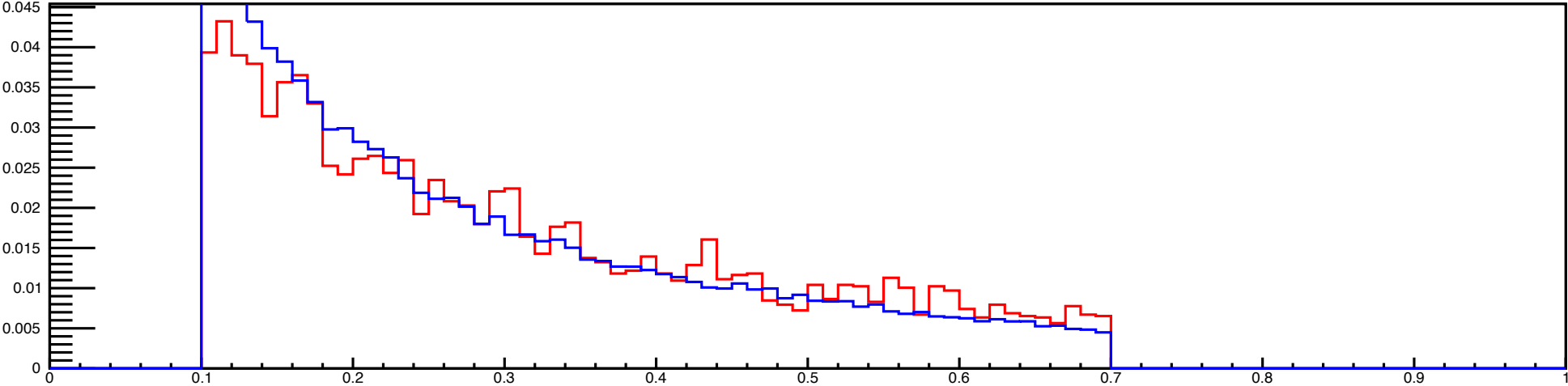
DJANGO : COMPARISON RD/MC

y

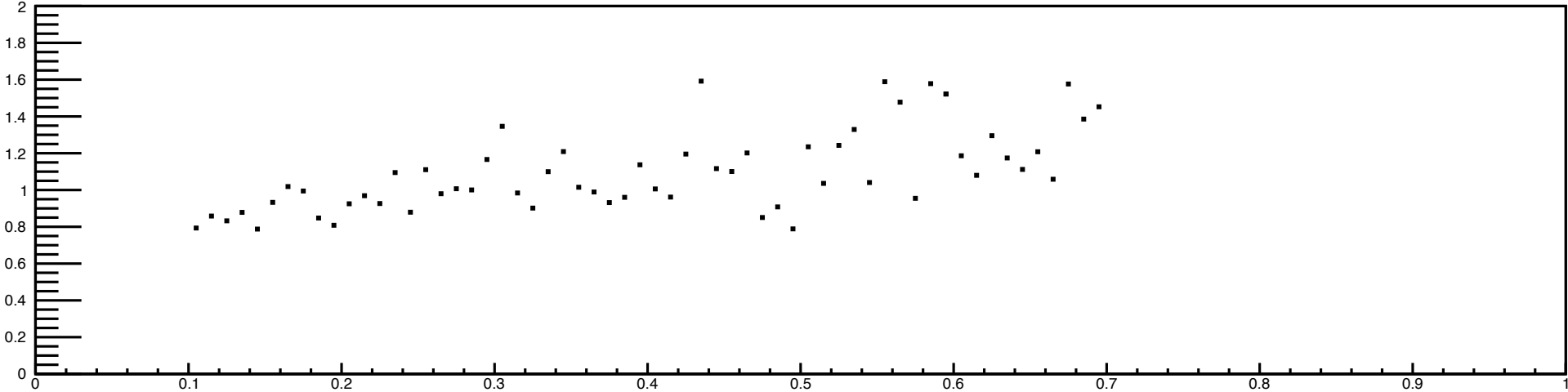
RD MC

All triggers

y All Trig



y All Trig

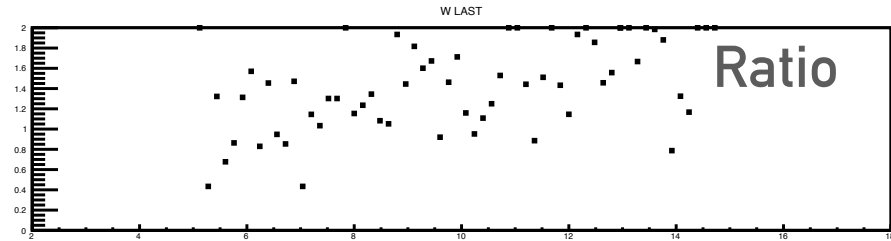
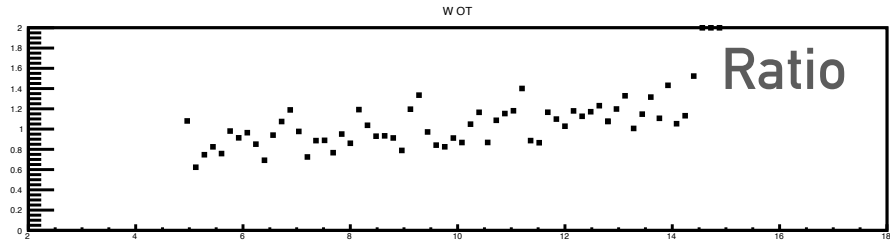
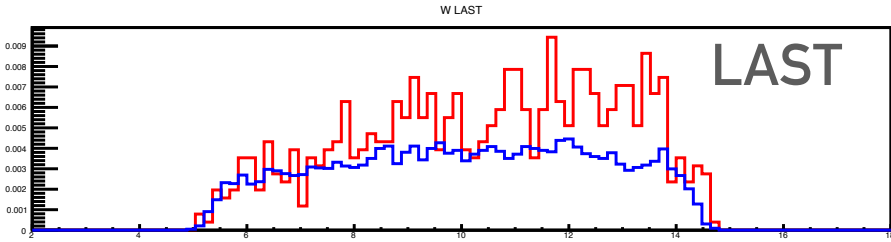
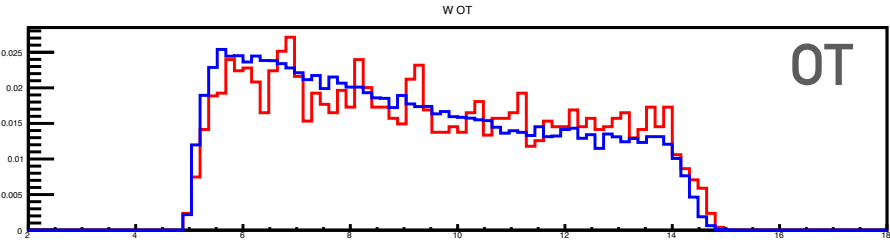
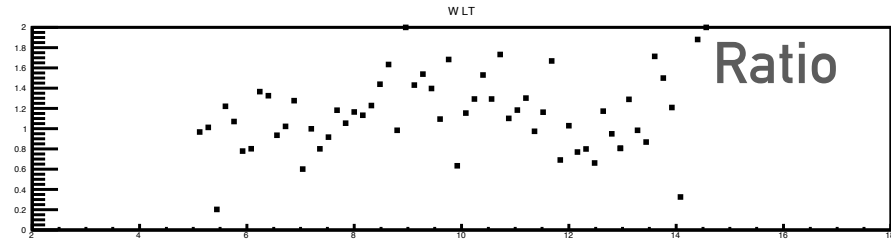
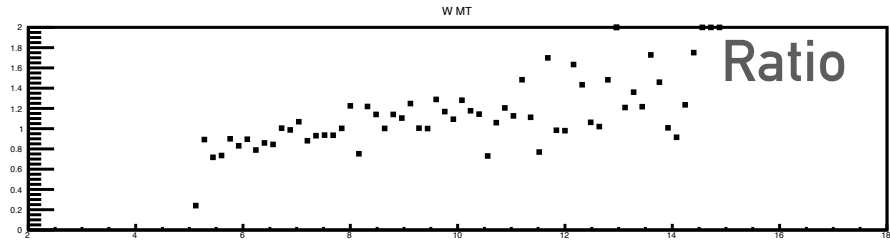
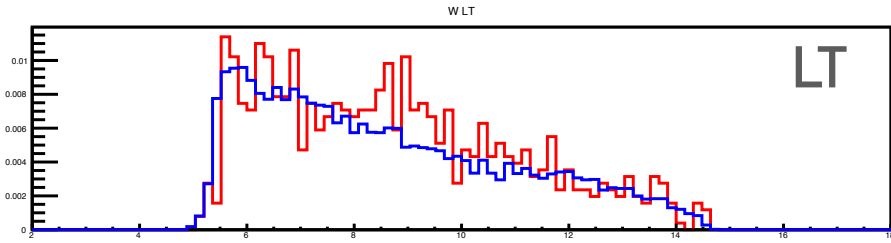
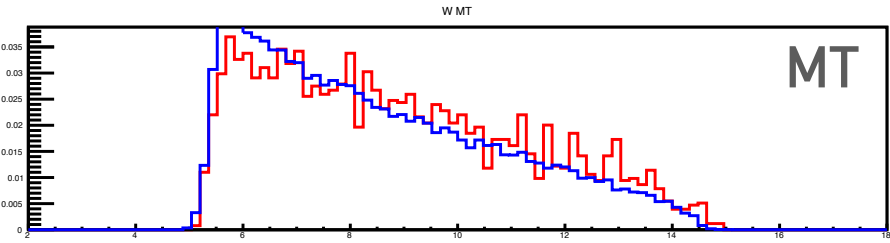


DJANGO : COMPARISON RD/MC

W

RD MC

Normalized over OT events



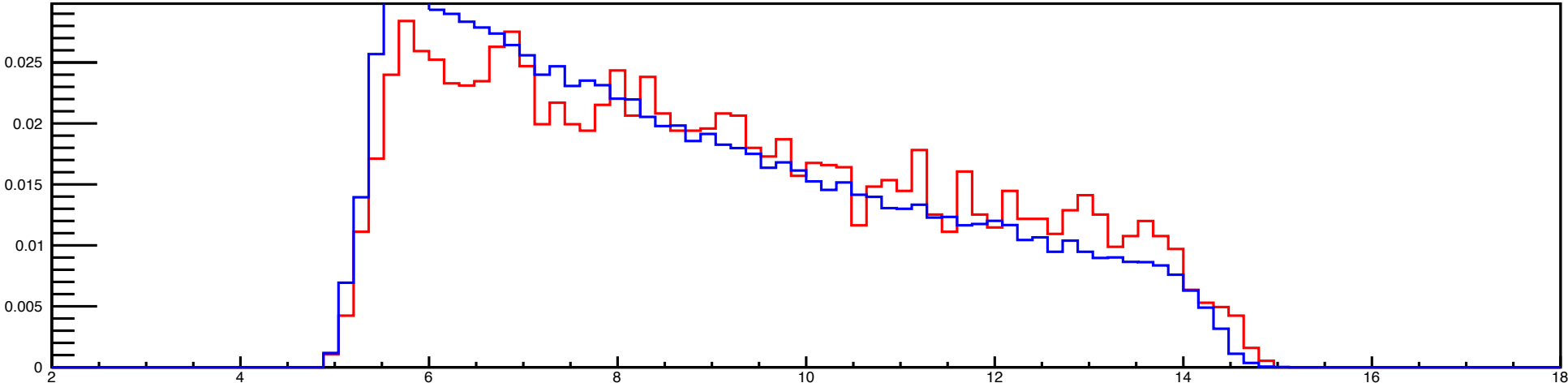
DJANGO : COMPARISON RD/MC

W

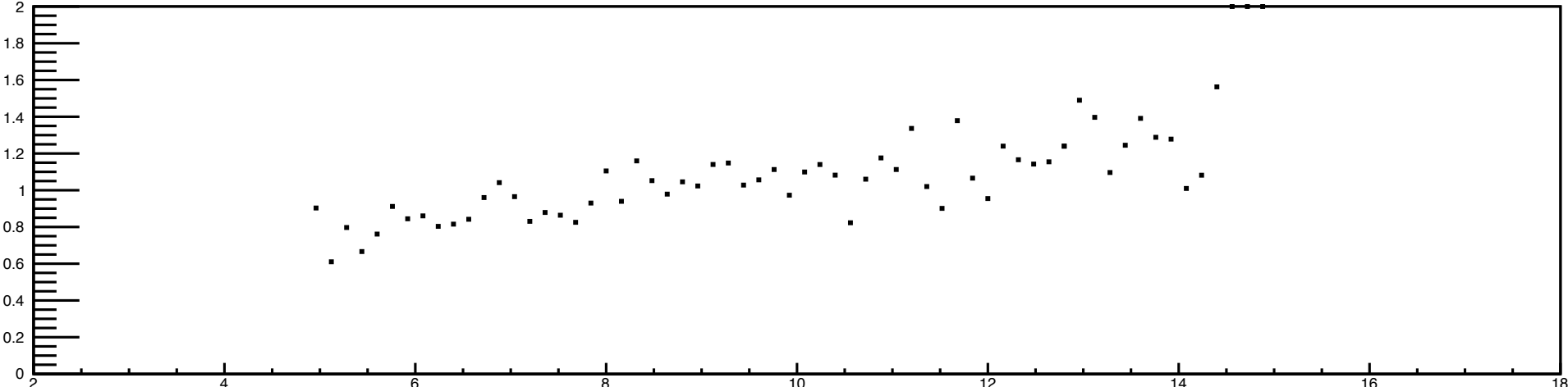
RD MC

All triggers

W All Trig



W All Trig

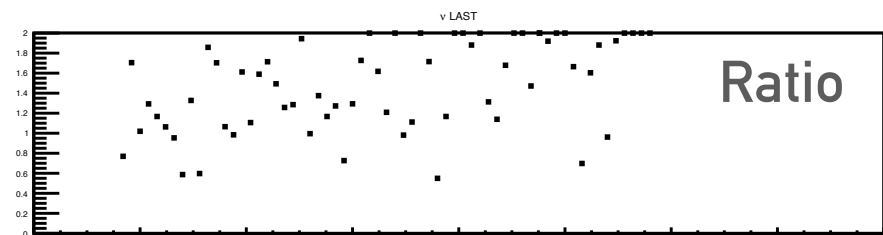
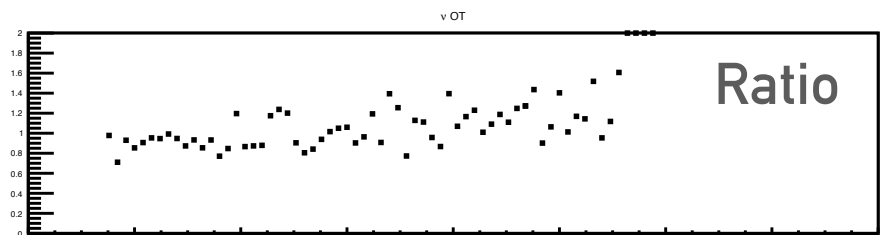
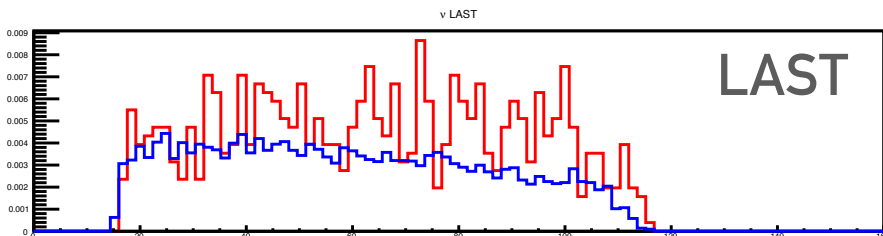
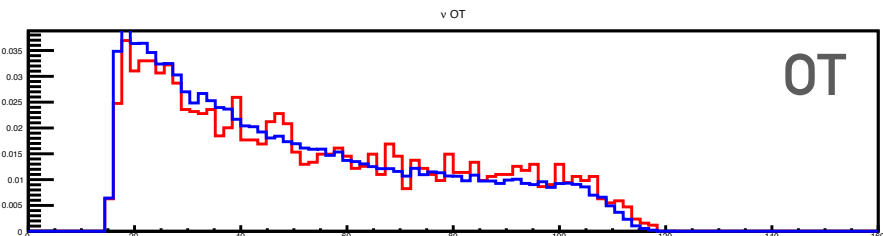
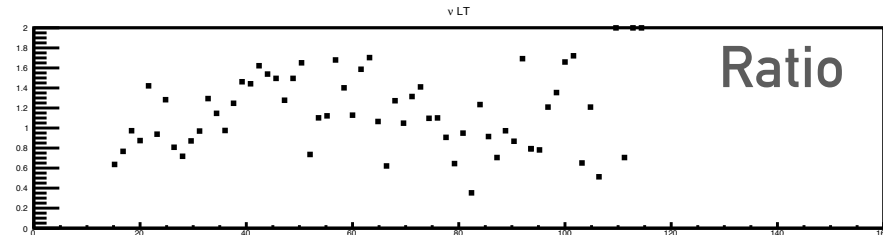
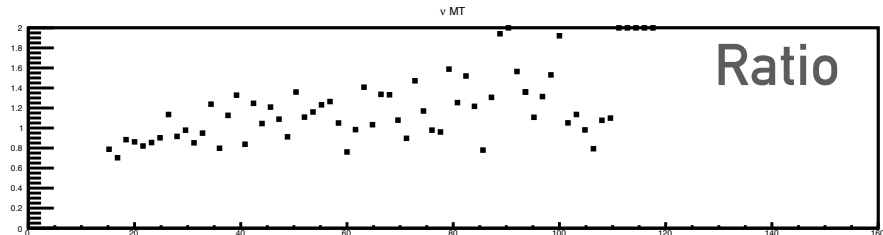
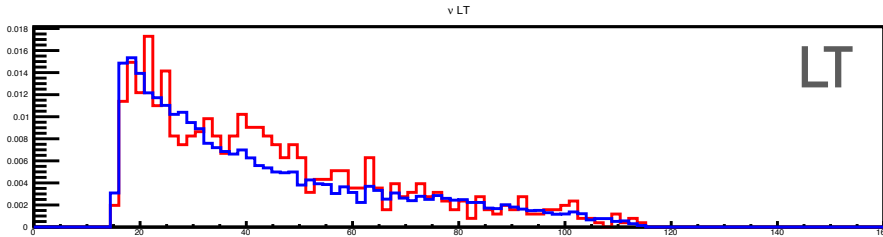
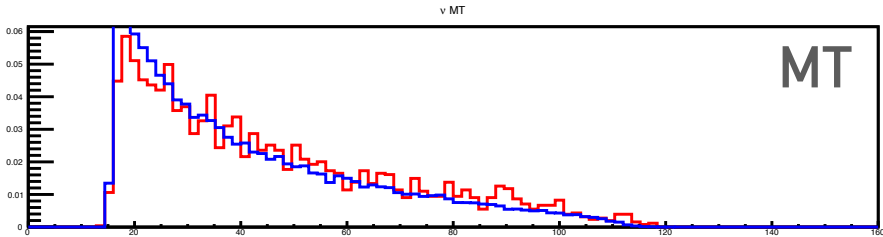


DJANGO: COMPARISON RD/MC



— RD — MC

Normalized over OT events



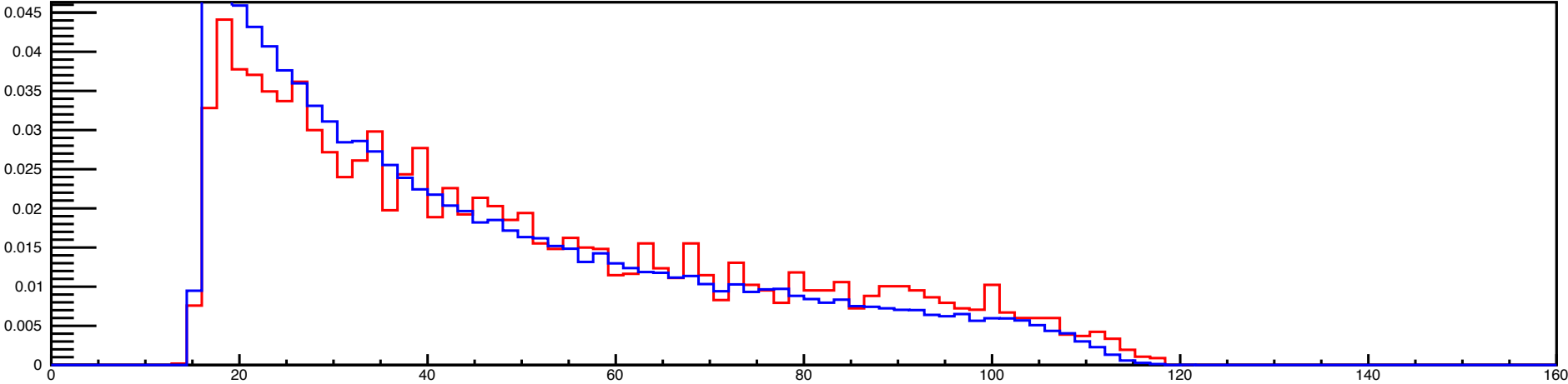
DJANGO : COMPARISON RD/MC



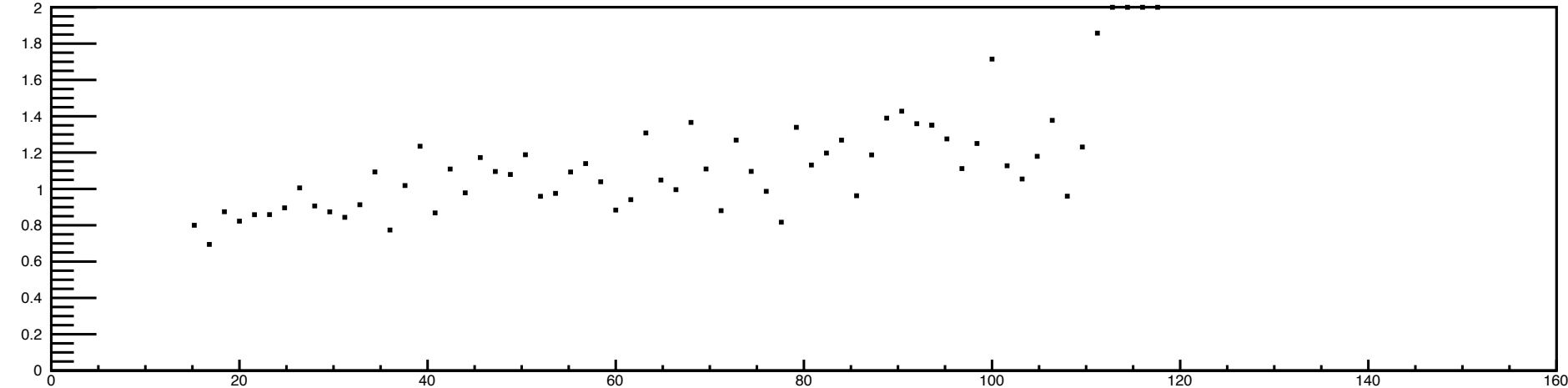
RD MC

All triggers

v All Trig



v All Trig

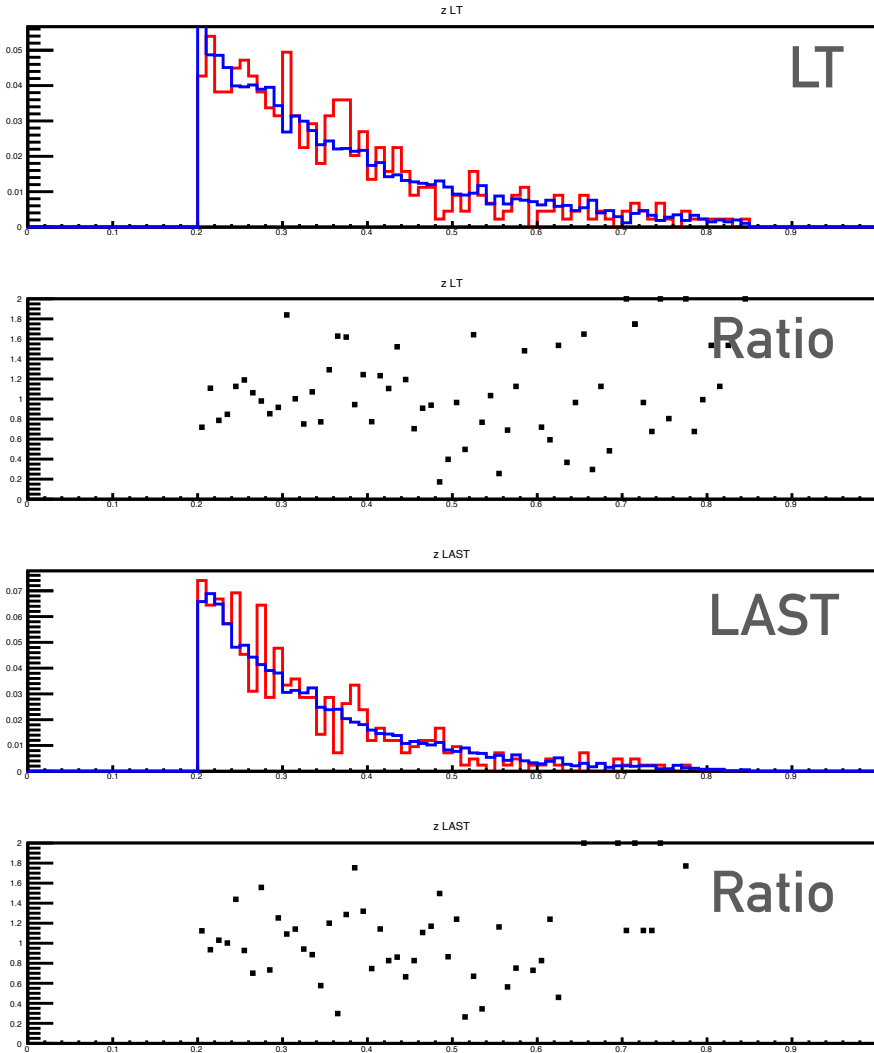
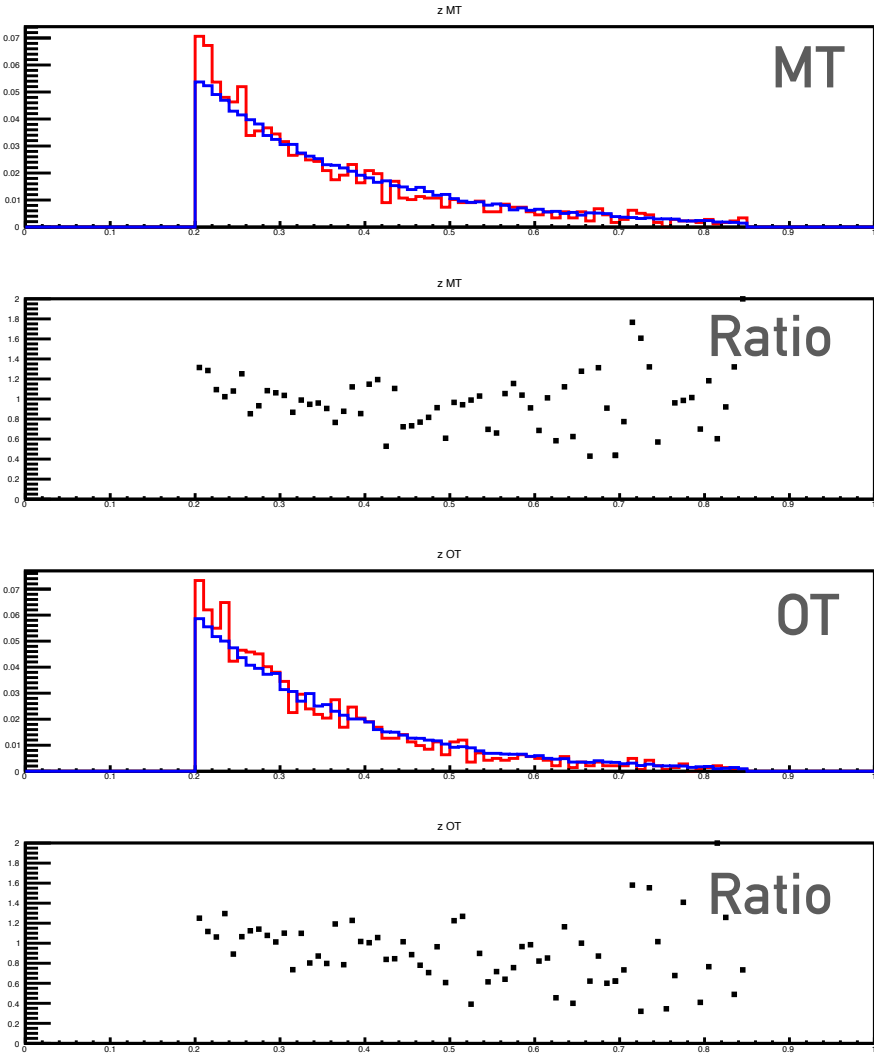


DJANGOH : COMPARISON RD/MC

z

RD MC

Normalized over OT events



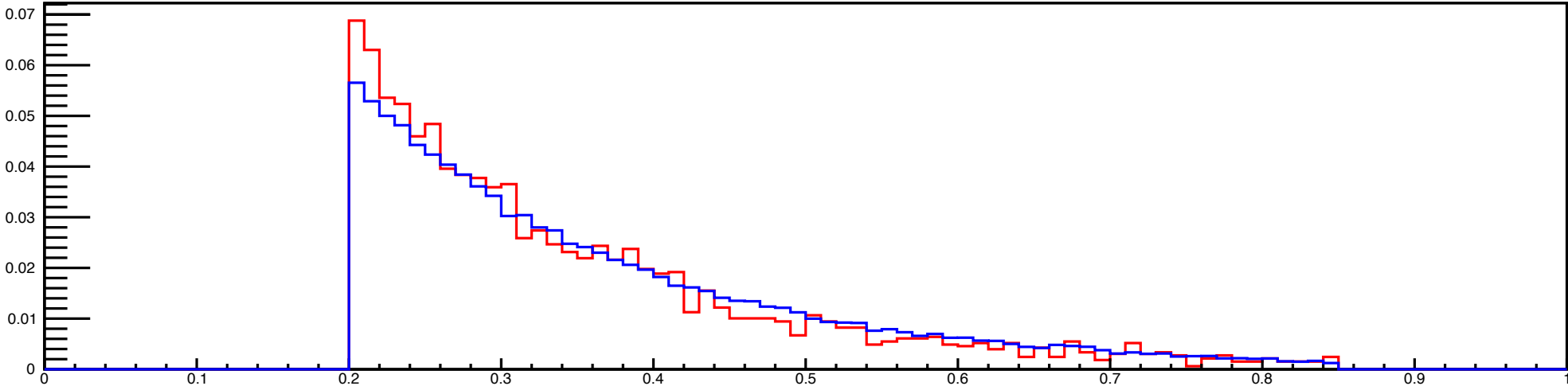
DJANGO : COMPARISON RD/MC

z

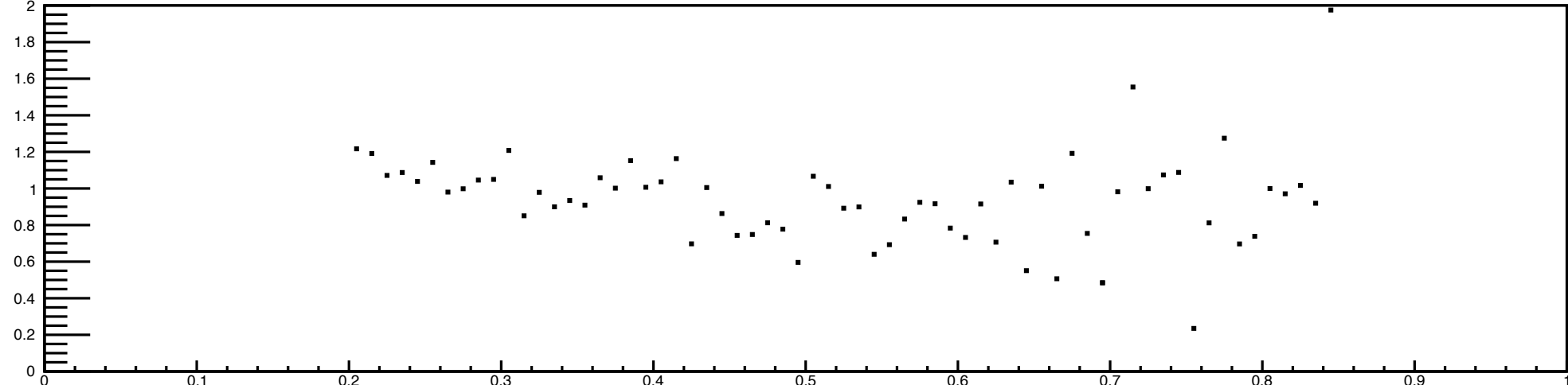
RD MC

All triggers

z All Trig



z All Trig



DJANGO : COMPARISON RD/MC

Take home message :

- ◆ Overall comparison quite good between RD and MC w/ Django for P09.
- ◆ Trigger by trigger : quite good overall except for LAST trigger constantly off. Removing LAST does not change overall results.
- ◆ Discrepancies on Q^2 OT and x_{Bj} MT/OT.
- ◆ Need more periods to have a more accurate comparison.