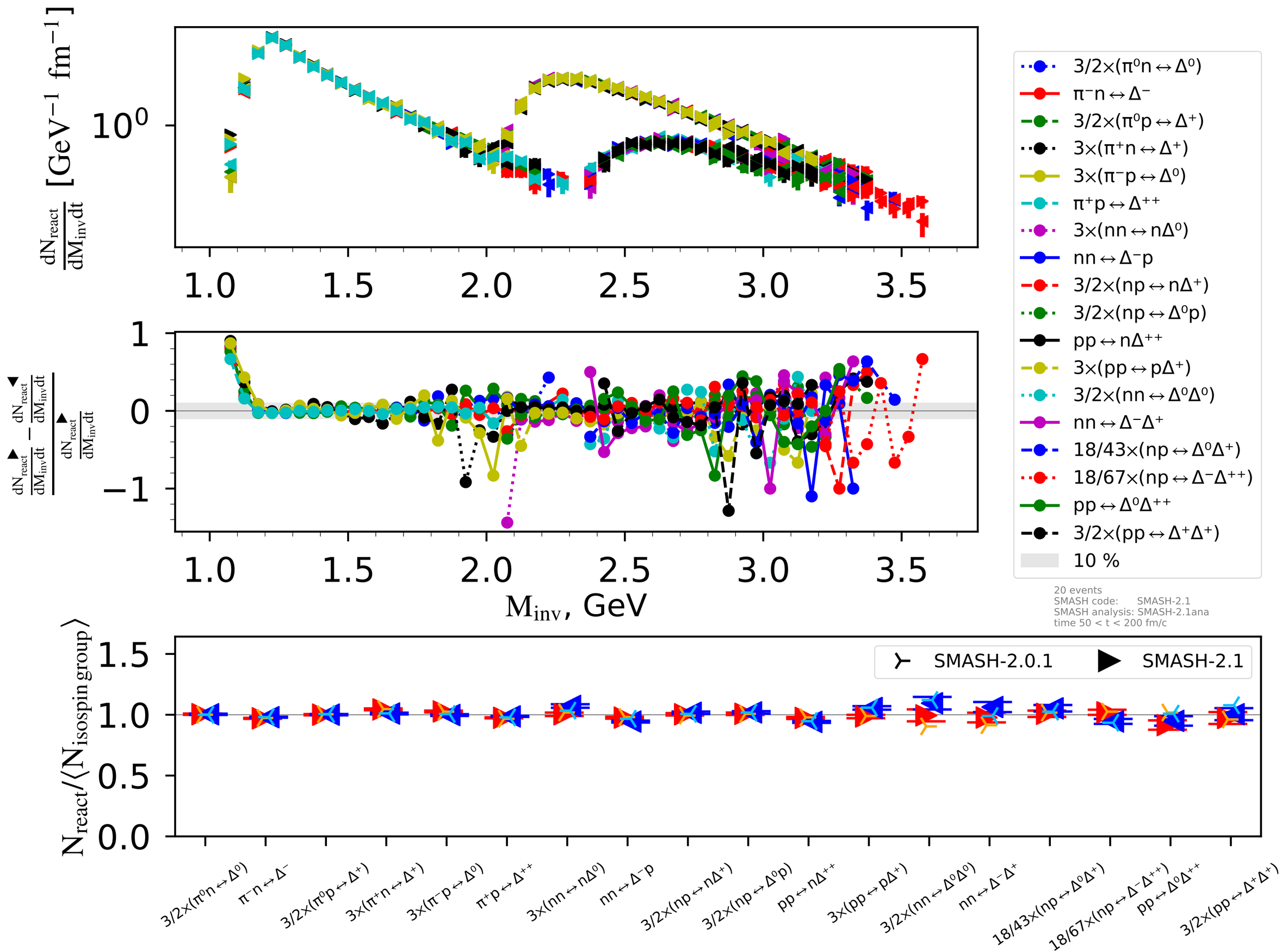
$\frac{dN_{react}}{dM_{inv}dt}$ [GeV^{-1} fm^{-1}]
10^0
1.0
1.5
2.0
2.5
3.0
3.5
$\frac{\frac{dN_{react}^{\blacktriangle}}{dM_{inv}dt} - \frac{dN_{react}^{\blacktriangledown}}{dM_{inv}dt}}{\frac{dN_{react}^{\blacktriangle}}{dM_{inv}dt}}$
1
0
−1
M_{inv}, GeV
3/2×(π⁰n↔Δ⁰)
π⁻n↔Δ⁻
3/2×(π⁰p↔Δ⁺)
3×(π⁺n↔Δ⁺)
3×(π⁻p↔Δ⁰)
π⁺p↔Δ⁺⁺
3×(nn↔nΔ⁰)
nn↔Δ⁻p
3/2×(np↔nΔ⁺)
3/2×(np↔Δ⁰p)
pp↔nΔ⁺⁺
3×(pp↔pΔ⁺)
3/2×(nn↔Δ⁰Δ⁰)
nn↔Δ⁻Δ⁺
18/43×(np↔Δ⁰Δ⁺)
18/67×(np↔Δ⁻Δ⁺⁺)
pp↔Δ⁰Δ⁺⁺
3/2×(pp↔Δ⁺Δ⁺)
10 %
20 events
SMASH code: SMASH-2.1
SMASH analysis: SMASH-2.1ana
time 50 < t < 200 fm/c
$N_{react}/\langle N_{isospin\ group}\rangle$
1.5
1.0
0.5
0.0
SMASH-2.0.1
SMASH-2.1
3/2x(π⁰n↔Δ⁰)
π⁻n↔Δ⁻
3/2x(π⁰p↔Δ⁺)
3x(π⁺n↔Δ⁺)
3x(π⁻p↔Δ⁰)
π⁺p↔Δ⁺⁺
3x(nn↔nΔ⁰)
nn↔Δ⁻p
3/2x(np↔nΔ⁺)
3/2x(np↔Δ⁰p)
pp↔nΔ⁺⁺
3x(pp↔pΔ⁺)
3/2x(nn↔Δ⁰Δ⁰)
nn↔Δ⁻Δ⁺
18/43x(np↔Δ⁰Δ⁺)
18/67x(np↔Δ⁻Δ⁺⁺)
pp↔Δ⁰Δ⁺⁺
3/2x(pp↔Δ⁺Δ⁺)