Extraction of the strong coupling constant (α_s) from photon structure function (F_2^{γ}) measurements with NNLO evolution

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Abstract: Place for Abstract.

KEYWORDS: QCD, NLO Computations, LHC, Top Quark

α	\mathbf{nt}		L -
1 :0	mt	eni	ГS

1 Experimental data

1

1 Experimental data

Something about data

Lep L3 2000	[3]	17	60.0	225.0	0.13	0.89
Lep L3 2005	[4]	10	12.5	12.5	0.013	0.36
Lep OPAL 1994	[5]	7	5.9	14.7	0.046	0.679
Lep OPAL 1997 1	[6]	10	7.5	135.0	0.046	0.679
Lep OPAL 1997 2	[7]	21	9.0	59	0.075	0.7
Lep OPAL 1997 3	[8]	8	1.86	3.76	0.004	0.141
Lep OPAL 2000	[9]	22	1.9	17.8	0.0012	0.3945
Lep OPAL 2002	[22]	12	12.1	780	0.175	0.725
Lep ALEPH 1999	[10]	11	9.9	284	0.039	0.54
Lep ALEPH 1999	[11]	16	17.3	67.2	0.065	0.8478
Lep DELPHI 1996	[12]	7	12.0	12.0	0.0405	0.2335
KEK-TRISTAN-AMY 1990	[13]	6	73.0	73.0	0.25	0.75
KEK-TRISTAN-AMY 1995	[14]	5	73.0	390	0.25	0.75
KEK-TRISTAN-AMY 1997	[15]	3	6.8	6.8	0.07	0.5
KEK-TRISTAN-TOPAZ 1994	[16]	8	5.1	80.0	0.043	0.785
DESY-PETRA-CELLO 1983	[17]	5	4.0	20.0	0.6	0.6
DESY-PETRA-TASSO 1986	[18]	5	23.0	23.0	0.11	0.9
DESY-PETRA-JADE 1983	[19]	8	24.0	100.0	0.05	0.75
DESY-PETRA-JADE 1984	[23]	15	2.4	5.3	0.05	0.75
DESY-PETRA-PLUTO 1984	[19]	15	2.4	9.2	0.063	0.72
DESY-PETRA-PLUTO 1987	[19]	4	45.0	45.0 F2+charm	0.175	0.825

Ref. Number of data points $Q_{min}^2/[\text{GeV}^2]$

1.9

10.8

0.24

0.24

24

11

[1]

[2]

[20]

22

19

 $Q_{max}^2/[{\rm GeV^2}]$

5.0

23.1

5.1

5.2

 x_{min}

0.0035

0.055

 x_{max}

0.15

0.4

0.55

0.16 Error!

0.01

0.07

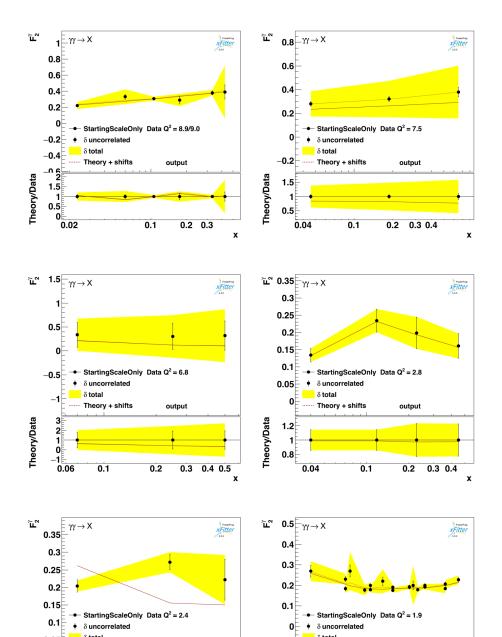
 $F_2^{\gamma} data \ set$

Lep L3 1998

Lep L3 1999

SLAC-PEP-TPC/2-GAMMA 1987 1

SLAC-PEP-TPC/2-GAMMA 1987 2



0.05 δ total

0.06

···· Theory + shifts

0.1

δ total

····· Theory + shifts

0.01

0.1

-0.1

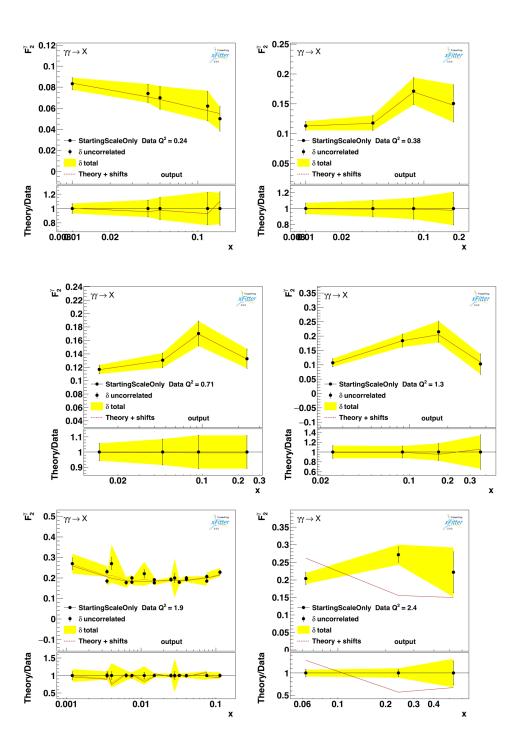
1.5

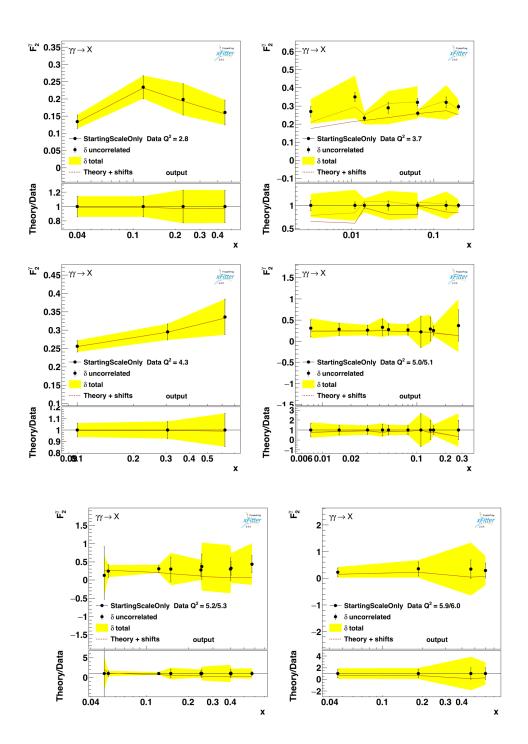
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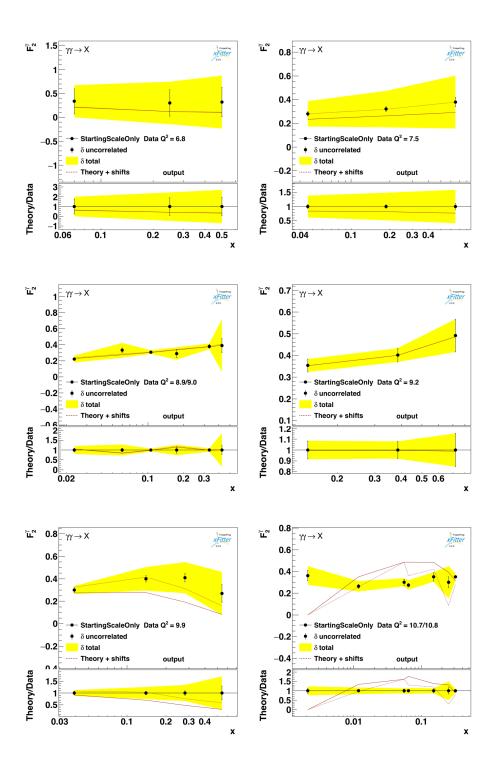
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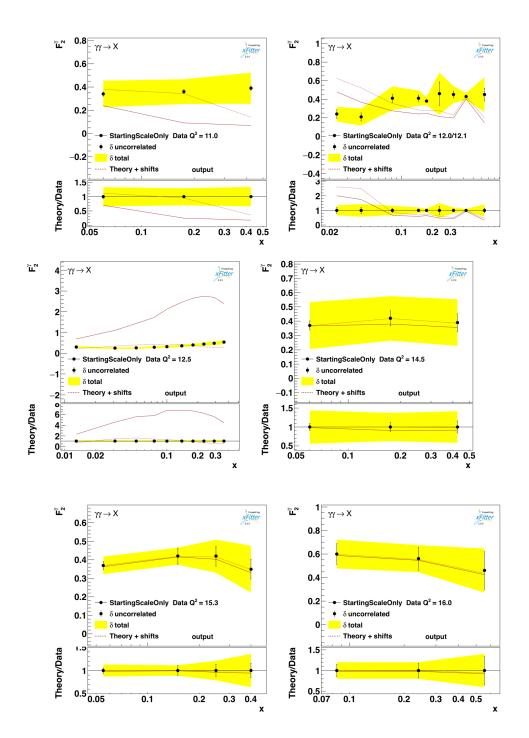
0.3 0.4

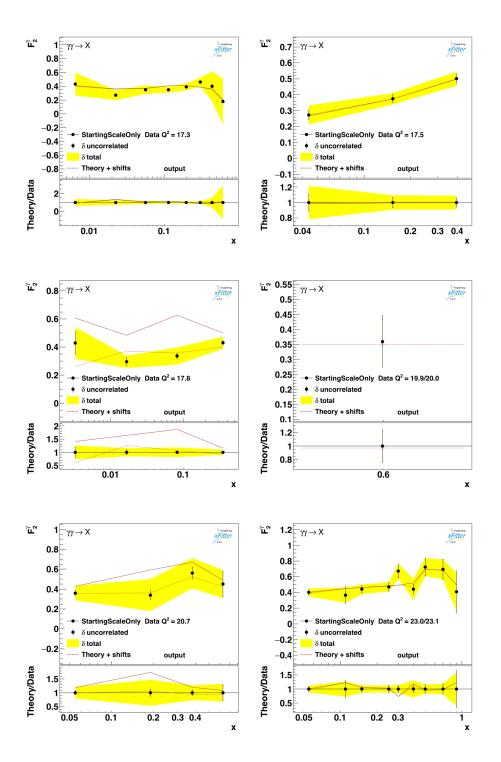
0.2

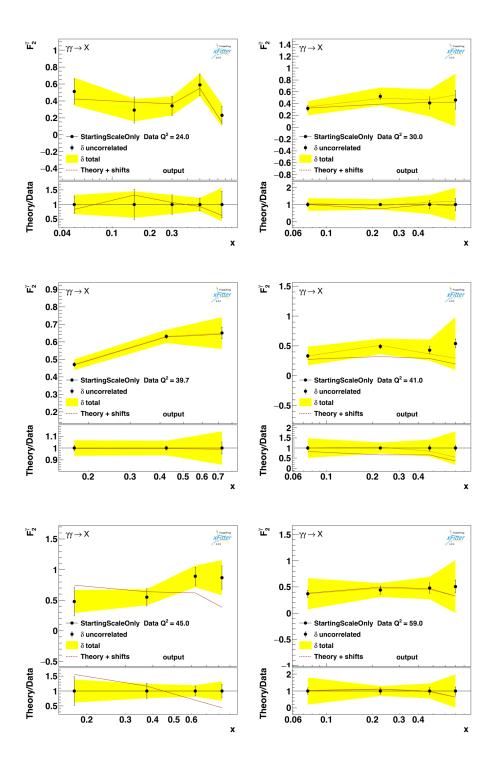


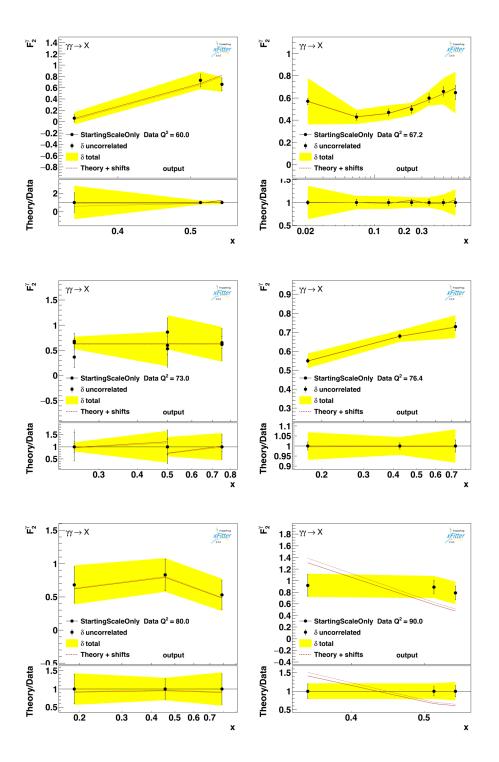


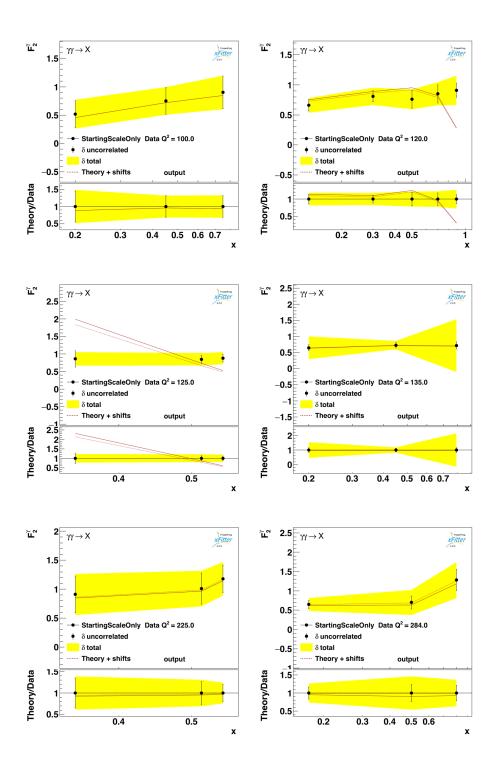


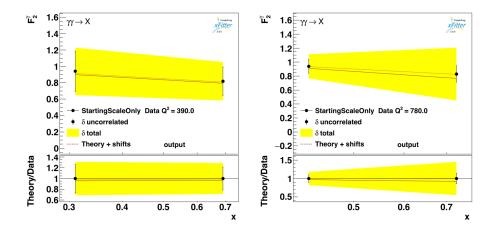












Acknowledgements

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