Tunable switches and parameters in LEPTO 6.5

Last updated: 961101

Lepto switches:

Switch:	Short description:	Default & alt. values:
LST(8)	QCD effects	D=12
LST(11)	F_L, (targetmass, higher twist)	D=0, alt. 1 -> F_L
LST(15)	Parton distributions	D=9, alt. any recent distr.
LST(16)	Parton distributions	D=1, alt. any recent distr.
LST(20)	Cut-off scheme for ME	D=5, alt. 6
LST(34)	Soft Colour Interactions	D=2, alt. 1 or 0=off
LST(35)	Seaquark treatment	D=1 = on, alt. 2 or 0 = off

Lepto parameters:

Parameter:	Short description:	Default & range of values:
PARL(3)	Primordial k_T	D=0.44 GeV, 0.3-0.8 GeV
PARL(7)	Prob. for SCI	D=0.5 , 0.0-0.5
PARL(8)	Cut-off in matrix element	D=0.04 , 0.0001-0.1
PARL(9)	Cut-off in matrix element	D=4 GeV^2 , 1.0-100.0 GeV^2 for LST(20)=6 use PARL(8)=0.001 PARL(9)=1.0 GeV^2
PARL(10)	width of the virtuality distribution of the sea quark partner for LST(34)=2	PARL(10)=0.44 GeV, 0.1-1.0 GeV
PARL(14)	p_T in target remnant split	D=0.35 GeV, 0.0-0.8 GeV
PARL(20)	Mass red. for complex remnant	D=0.10 GeV, 0.0-0.25 GeV
PYPAR(21)	Lambda_QCD in initial shower	D=from parton densities, 0.1-0.4 GeV
PYPAR(22)	Cut-off in initial shower	D=1 GeV^2 , 0.5-4.0 GeV^2 should preferable be the same as PARJ(82)^2, other values may require changing PARJ(41) and PARJ(42).

Jetset 7.4.07 parameters:

Parameter:	Short description:	Default & range of values:
PARU(112)	Lambda_QCD in alpha_s	D=from parton densities, ,0.1-0.4 GeV
PARJ(41)	a in fragmentation fcn	D=0.3 , *

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PARJ(42)        b in fragmentation fcn          D=0.58 GeV^-2, *
PARJ(81)        Lambda_QCD in final shower      D=0.29 GeV   , *
PARJ(82)        Cut-off in final shower         D=1.0 GeV    , *

* changing these parameters should be done with caution since they have
  been tuned from LEP measurements. A change of one of the parameters
  may require simultaneous changes of the other parameters as well.
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Constructed by AE and JR
