PYTHIA 6.1

Quark and lepton codes.

KF	Name	Printed	KF	Name	Printed
1	d	d	11	e^-	e-
2	u	u	12	ν_e	nu_e
3	s	s	13	μ^-	mu-
4	c	c	14	ν_μ	nu_mu
5	b	b	15	τ^-	tau-
6	t	t	16	ν_τ	nu_tau
7	b	b'	17	τ'	tau'
8	t	t'	18	ν'_τ	nu_tau'
9			19		
10			20		

Gauge bosons and other foundamental bosons.

KF	Name	Printed	KF	Name	Printed
21	g	g	31		
22	γ	gamma	32	Z'^0	Z'0
23	Z^0	Z0	33	Z''^0	Z"0
24	W^+	W+	34	W'^+	W'+
25	h^0	h0	35	H^0	H0
26			36	A^0	A0
27			37	H^+	H+
28	$\mathbb{R}$	reggeon	38	η_{techni}	eta_tech0
29	$\mathbb{P}$	pomeron	39	L_Q	LQ
30			40	R^0	R0

Thecnicolor

KF	Name	Printed	KF	Name	Printed
51	π^0_{tc}		52	π'_{tc}	
53	π'^0_{tc}		54	ρ^0_{tc}	
55	ρ^+_{tc}		56	ω^0_{tc}	

LR-symmetric

KF	Name	Printed	KF	Name	Printed
61	H^{++}_L		62	H^{++}_R	
63	W^+_R		64	ν_{Re}	
65	$\nu_{R\mu}$		66	$\nu_{R\tau}$	

Meson codes

KF	Name	Printed	KF	Name	Printed
211	π^+	pi+	213	ρ^+	rho+
311	K^0	K0	313	K^{*0}	K*0
321	K^+	K+	323	K^{*+}	K*+
411	D^+	D+	413	D^{*+}	D*+
421	D^0	D0	423	D^{*0}	D*0
431	D_s^+	D_s+	433	$\mathrm{D}_\mathrm{s}^{*+}$	D*_s+
511	B^0	B0	513	B^{*0}	B*0
521	B^+	B+	523	B^{*+}	B*+
531	B_s^0	B_s0	533	$\mathrm{B}_\mathrm{s}^{*0}$	B*_s0
541	B_c^+	B_c+	543	$\mathrm{B}_\mathrm{c}^{*+}$	B*_c+
111	π^0	pi0	113	ρ^0	rho0
221	η	eta	223	ω	omega
331	η'	eta'	333	ϕ	phi
441	η_c	eta_c	443	J/ψ	J/psi
551	η_b	eta_b	553	Υ	Upsilon
661	η_t	eta_t	663	Θ	Theta
130	K_L^0	K_L0			
310	K_S^0	K_S0			
10213	b_1	b_1+	10211	a_0^+	a_0+
10313	K_1^0	K_10	10311	K_0^{*0}	K*_00
10323	K_1^+	K_1+	10321	K_0^{*+}	K*_0+
10413	D_1^+	D_1+	10411	D_0^{*+}	D*_0+
10423	D_1^0	D_10	10421	D_0^{*0}	D*_00
10433	$\mathrm{D}_{1\mathrm{s}}^+$	D_1s+	10431	$\mathrm{D}_{0\mathrm{s}}^{*+}$	D*_0s+
10113	b_1^0	b_10	10111	a_0^0	a_00
10223	h_1^0	h_10	10221	f_0^0	f_00
10333	$\mathrm{h}_1'^0$	h'_10	10331	$\mathrm{f}_0'^0$	f'_00
10443	$\mathrm{h}_{1\mathrm{c}}^0$	h_1c0	10441	$\chi_{0\mathrm{c}}^0$	chi_0c0
20213	a_1^+	a_1+	215	a_2^+	a_2+
20313	K_1^{*0}	K*_10	315	K_2^{*0}	K*_20
20323	K_1^{*+}	K*_1+	325	K_2^{*+}	K*_2+
20413	D_1^{*+}	D*_1+	415	D_2^{*+}	D*_2+
20423	D_1^{*0}	D*_10	425	D_2^{*0}	D*_20
20433	$\mathrm{D}_{1\mathrm{s}}^{*+}$	D*_1s+	435	$\mathrm{D}_{2\mathrm{s}}^{*+}$	D*_2s+
20113	a_1^0	a_10	115	a_2^0	a_20
20223	f_1^0	f_10	225	f_2^0	f_20
20333	$\mathrm{f}_1'^0$	f'_10	335	$\mathrm{f}_2'^0$	f'_20
20443	$\chi_{1\mathrm{c}}^0$	chi_1c0	445	$\chi_{2\mathrm{c}}^0$	chi_2c0
100443	ψ'	psi'			
100553	Υ'	Upsilon'			

Baryon codes.

KF	Name	Printed	KF	Name	Printed
			1114	Δ^-	Delta-
2112	n	n0	2114	Δ^0	Delta0
2212	p	p+	2214	Δ^+	Delta+
			2224	Δ^{++}	Delta++
3112	Σ^-	Sigma-	3114	Σ^{*-}	Sigma*-
3122	Λ^0	Lambda0			
3212	Σ^0	Sigma0	3214	Σ^{*0}	Sigma*0
3222	Σ^+	Sigma+	3224	Σ^{*+}	Sigma*+
3312	Ξ^-	Xi-	3314	Ξ^{*-}	Xi*-
3322	Ξ^0	Xi0	3324	Ξ^{*0}	Xi*0
			3334	Ω^-	Omega-
4112	Σ_c^0	Sigma_c0	4114	Σ_c^{*0}	Sigma*_c0
4122	Λ_c^+	Lambda_c+			
4212	Σ_c^+	Sigma_c+	4214	Σ_c^{*+}	Sigma*_c+
4222	Σ_c^{++}	Sigma_c++	4224	Σ_c^{*++}	Sigma*_c++
4132	Ξ_c^0	Xi_c0			
4312	$\Xi_c'^0$	Xi'_c0	4314	Ξ_c^{*0}	Xi*_c0
4232	Ξ_c^+	Xi_c+			
4322	$\Xi_c'^+$	Xi'_c+	4324	Ξ_c^{*+}	Xi*_c+
4332	Ω_c^0	Omega_c0	4334	Ω_c^{*0}	Omega*_c0
5112	Σ_b^-	Sigma_b-	5114	Σ_b^{*-}	Sigma*_b-
5122	Λ_b^0	Lambda_b0			
5212	Σ_b^0	Sigma_b0	5214	Σ_b^{*0}	Sigma*_b0
5222	Σ_b^+	Sigma_b+	5224	Σ_b^{*+}	Sigma*_b+

Di-quark codes.

KF	Name	Printed	KF	Name	Printed
			1103	dd_1	dd_1
2101	ud_0	ud_0	2103	ud_1	ud_1
			2203	uu_1	uu_1
3101	sd_0	sd_0	3103	sd_1	sd_1
3201	su_0	su_0	3203	su_1	su_1
			3303	ss_1	ss_1

Diffractive state codes.

KF	Printed	Meaning
110	rho_diff0	Diffractive $\pi^0/\rho^0/\gamma$ state
210	pi_diffr+	Diffractive π^+ state
220	omega_di0	Diffractive ω state
330	phi_diff0	Diffractive ϕ state
440	J/psi_di0	Diffractive J/ψ state
2110	n_diffr	Diffractive n state
2210	p_diffr+	Diffractive p state

Various special codes.

KF	Printed	Meaning
81	`specflav`	Spectator flavour; used in decay-product listings
82	`rndmflav`	A random u, d, or s flavour; possible decay product
83	`phasespa`	Simple isotropic phase-space decay
84	`c-hadron`	Information on decay of generic charm hadron
85	`b-hadron`	Information on decay of generic bottom hadron
86	`t-hadron`	Information on decay of generic top hadron
87	`l-hadron`	Information on decay of generic low hadron
88	`h-hadron`	Information on decay of generic high hadron
89	`Wvirt`	Off-mass-shell W in weak decays of t, l, h or χ
90	`diquark`	Generic code for diquark colour information
91	`cluster`	Parton system in cluster fragmentation
92	`string`	Parton system in string fragmentation
93	`indep.`	Parton system in independent fragmentation
94	`CMshower`	Four-momentum of time-like showering system
95	`SPHEaxis`	Event axis found with `LUSPHE`
96	`THRUaxis`	Event axis found with `LUTHRU`
97	`CLUSjet`	Jet (cluster) found with `LUCLUS`
98	`CELLjet`	Jet (cluster) found with `LUCELL`
99	`table`	Tabular output from `LUTABU`
100		

Susy particles.

KF	Name	Printed	KF	Name	Printed
1000001	$\tilde{\mathrm{d}}_L$		2000001	$\tilde{\mathrm{d}}_R$	
1000002	$\tilde{\mathrm{u}}_L$		2000002	$\tilde{\mathrm{u}}_R$	
1000003	$\tilde{\mathrm{s}}_L$		2000003	$\tilde{\mathrm{s}}_R$	
1000004	$\tilde{\mathrm{c}}_L$		2000004	$\tilde{\mathrm{c}}_R$	
1000005	$\tilde{\mathrm{b}}_1$		2000005	$\tilde{\mathrm{b}}_2$	
1000006	$\tilde{\mathrm{t}}_1$		2000006	$\tilde{\mathrm{t}}_2$	
1000011	$\tilde{\mathrm{e}}_L$		2000011	$\tilde{\mathrm{e}}_R$	
1000012	$\tilde{\nu}_{\mathrm{e}L}$		2000012	$\tilde{\nu}_{\mathrm{e}R}$	
1000013	$\tilde{\mu}_L$		2000013	$\tilde{\mu}_R$	
1000014	$\tilde{\nu}_{\mu L}$		2000014	$\tilde{\nu}_{\mu R}$	
1000015	$\tilde{\tau}_1$		2000015	$\tilde{\tau}_2$	
1000016	$\tilde{\nu}_{\tau L}$		2000016	$\tilde{\nu}_{\tau R}$	
1000021	$\tilde{\mathrm{g}}$		1000025	$\tilde{\chi}_3^0$	
1000022	$\tilde{\chi}_1^0$		1000035	$\tilde{\chi}_4^0$	
1000023	$\tilde{\chi}_2^0$		1000037	$\tilde{\chi}_2^+$	
1000024	$\tilde{\chi}_1^+$		1000039	$\tilde{\mathrm{G}}$	