# Testing heppennames

## Generated by andy

July 8, 2014

# 1 Normal font

- $\backslash PB \Rightarrow B$
- $\backslash PBpm \Rightarrow B^{\pm}$
- \PBmp  $\Rightarrow B^{\mp}$
- $\backslash PBp \Rightarrow B^+$
- $\PBm \Rightarrow B^-$
- $\backslash PBz \Rightarrow B^0$
- \PBst  $\Rightarrow B^*$
- \PdB  $\Rightarrow B_d^0$
- \PuB  $\Rightarrow$  B<sup>+</sup>
- \PcB  $\Rightarrow$  B<sub>c</sub><sup>+</sup>
- \PsB  $\Rightarrow$  B<sub>s</sub><sup>0</sup>
- \PaB  $\Rightarrow \overline{B}$
- \PaBz  $\Rightarrow \overline{B}^0$
- $\PauB \Rightarrow B^-$

- $\backslash PacB \Rightarrow B_c^-$
- ullet \PasB  $\Rightarrow$   $\overline{\mathrm{B}}_{\mathrm{s}}^{0}$
- kaon  $\begin{tabular}{l} \bullet & \text{kaon} \\ \begin{tabular}{l} \bullet & \text{K} \\ \end{tabular}$

- positive kaon  $\ensuremath{\backslash PKp} \Rightarrow \ensuremath{\mathrm{K}^+}$
- K-long  $\label{eq:pkzl} \ \ \, \mathsf{NFL} \Rightarrow \mathsf{K}^0_\mathsf{L}$
- K-short  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular}{l}$

- $K \operatorname{star}$ \PKst  $\Rightarrow K^*$
- neutral anti-kaon $\label{eq:pakz} \ \ \, \! \! \! \! \! \backslash \mathtt{PaKz} \Rightarrow \overline{\mathrm{K}}^0$
- \PKeiii  $\Rightarrow K_{e3}$
- \PKgmiii  $\Rightarrow K_{\mu 3}$
- \PKzeiii  $\Rightarrow K_{e3}^0$
- \PKzgmiii  $\Rightarrow K_{\mu 3}^0$
- \PKia  $\Rightarrow$  K<sub>1</sub>(1400)
- \PKii  $\Rightarrow K_2(1770)$
- \PKi  $\Rightarrow$  K<sub>1</sub>(1270)
- \PKsti  $\Rightarrow$  K\*(892)
- \PKsta  $\Rightarrow$  K\*(1370)
- \PKstb  $\Rightarrow$  K\*(1680)
- \PKstiii  $\Rightarrow$  K<sub>3</sub>(1780)
- \PKstii  $\Rightarrow$  K<sub>2</sub><sup>\*</sup>(1430)
- \PKstiv  $\Rightarrow K_4^*(2045)$
- \PKstz  $\Rightarrow K_0^*(1430)$
- $\PN \Rightarrow N$
- \PNa  $\Rightarrow$  N(1440)  $P_{11}$
- \PNb  $\Rightarrow$  N(1520)  $D_{13}$
- \PNc  $\Rightarrow$  N(1535)  $S_{11}$

- \PNd  $\Rightarrow N(1650) S_{11}$
- \PNe  $\Rightarrow$  N(1675) D<sub>15</sub>
- \PNf  $\Rightarrow$  N(1680)  $F_{15}$
- \PNg  $\Rightarrow$  N(1700)  $D_{13}$
- \PNh  $\Rightarrow$  N(1710)  $P_{11}$
- \PNi  $\Rightarrow$  N(1720)  $P_{13}$
- \PNj  $\Rightarrow$  N(2190)  $G_{17}$
- $\backslash PNk \Rightarrow N(2220) H_{19}$
- \PN1  $\Rightarrow$  N(2250)  $G_{19}$
- $\PNm \Rightarrow N(2600) I_{1.11}$
- gluon  $\Pg \Rightarrow g$
- photon  $\mathsf{Pgg} \Rightarrow \gamma$
- W boson  $\backslash PW \Rightarrow W$
- charged W boson  $\label{eq:PWmp} \Rightarrow W^{\mp}$

- \PWR  $\Rightarrow$  W<sub>R</sub>
- W-prime boson  $\mathsf{PWpr} \Rightarrow W'$
- Z boson  $\PZ \Rightarrow Z$
- Z-prime boson  $\PZpr \Rightarrow Z'$
- left-right Z boson  $\label{eq:ZLR} \ \, \Rightarrow \ \, Z_{LR}$
- $\PZgc \Rightarrow Z_{\chi}$
- \PZge  $\Rightarrow$   $Z_{\eta}$
- $\PZgy \Rightarrow Z_{\psi}$
- $\bullet \ \backslash \mathtt{PZi} \Rightarrow Z_1$
- axion  $\ensuremath{\backslash \mathtt{PAz}} \Rightarrow A^0$
- explicitly neutral standard/heavy Higgs  $\begin{tabular}{l} \begin{tabular}{l} \begin$

- positive-charged Higgs  $\PHp \Rightarrow H^+$
- negative-charged Higgs  $\PHm \Rightarrow H^-$

- charged fermion  $\mathsf{Pfmp} \Rightarrow f^{\mp}$

- generic neutrino  $\mathsf{Pgn} \Rightarrow \nu$
- neutrino (for lepton ell) \Pgnl \Rightarrow \\nu\_{\ell}
- anti-neutrino (for lepton ell)  $\text{\ensuremath{$\backslash$}Pagnl} \Rightarrow \bar{\nu_\ell}$
- e plus/minus  $\ensuremath{\backslash \text{Pepm}} \Rightarrow e^{\pm}$
- e minus/plus $\ensuremath{\backslash Pemp} \Rightarrow e^{\mp}$
- electron  $\ensuremath{\backslash \text{Pem}} \Rightarrow e^-$
- positron  $\mathsf{Pep} \Rightarrow e^+$

- mu plus/minus  $\mathsf{Pgmpm} \Rightarrow \mu^{\pm}$
- mu minus/plus  $\mathsf{Pgmmp} \Rightarrow \mu^{\mp}$
- anti-muon  $\protect\operatorname{\mathsf{NPgmp}} \Rightarrow \mu^+$
- tau plus/minus  $\protect{\mathsf{NPgtpm}} \Rightarrow \tau^{\pm}$
- tau minus/plus  $\mathsf{Pgtmp} \Rightarrow \tau^{\mp}$

- electron neutrino  $\label{eq:pgne} \verb+ Pgne \Rightarrow \nu_e$
- muon neutrino  $\protect\operatorname{\mathsf{Pgngm}} \Rightarrow \nu_{\mu}$
- tau neutrino  $\mathsf{Pgngt} \Rightarrow \nu_{\tau}$
- electron anti-neutrino  $\text{\ensuremath{\backslash} Pagne} \Rightarrow \overline{\nu}_{e}$
- muon anti-neutrino  $\mathsf{Pagngm} \Rightarrow \overline{\nu}_{\mu}$

- tau anti-neutrino  $\backslash \mathsf{Pagngt} \Rightarrow \overline{\nu}_{\tau}$
- anti-quark  $\label{eq:paq} \ensuremath{ \mbox{\sc NPaq}} \Rightarrow \bar{q}$
- up quark  $\mathsf{Pqu} \Rightarrow \mathbf{u}$
- strange quark  $\protect\pro$
- charm quark  $\ensuremath{\backslash \mathsf{Pqc}} \Rightarrow c$
- bottom quark  $\Pqb \Rightarrow b$
- top quark  $\Pqt \Rightarrow t$

- $\Pqb \Rightarrow b$
- $\backslash Pqc \Rightarrow c$
- $\Pqd \Rightarrow d$
- $\P \Rightarrow s$
- $\backslash Pqt \Rightarrow t$
- $\P u \Rightarrow u$
- $\backslash Pq \Rightarrow q$

- proton  $\proton$   $\proton$
- neutron  $\Pn \Rightarrow n$

- $\backslash Pcgc \Rightarrow \chi_c$
- $\backslash Pcgcii \Rightarrow \chi_{c2}(1P)$
- $\backslash Pcgci \Rightarrow \chi_{c1}(1P)$
- $\backslash Pcgcz \Rightarrow \chi_{c0}(1P)$
- \Pfia  $\Rightarrow$  f<sub>1</sub>(1390)
- \Pfib  $\Rightarrow$  f<sub>1</sub>(1510)
- \Pfiia  $\Rightarrow$  f<sub>2</sub>(1720)
- \Pfiib  $\Rightarrow$  f<sub>2</sub>(2010)
- \Pfiic  $\Rightarrow f_2(2300)$
- $\bullet \ \backslash \texttt{Pfiid} \Rightarrow f_2(2340) \\$
- \Pfiipr  $\Rightarrow$  f'\_2(1525)
- \Pfii  $\Rightarrow$  f<sub>2</sub>(1270)
- \Pfiv  $\Rightarrow$  f<sub>4</sub>(2050)
- $\bullet \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ f_1(1285)$
- \Pfza  $\Rightarrow f_0(1400)$
- \Pfzb  $\Rightarrow$  f<sub>0</sub>(1590)
- $\backslash Pfz \Rightarrow f_0(975)$
- $\backslash PgD \Rightarrow \Delta$
- $\bullet \ \ \backslash \mathrm{PgDa} \Rightarrow \Delta(1232) \ \mathrm{P}_{33}$

- \PgDb  $\Rightarrow \Delta(1620) S_{31}$
- \PgDc  $\Rightarrow \Delta(1700) D_{33}$
- \PgDd  $\Rightarrow \Delta(1900) S_{31}$
- \PgDe  $\Rightarrow \Delta(1905) \, \mathrm{F}_{35}$
- \PgDf  $\Rightarrow \Delta(1910) P_{31}$
- \PgDh  $\Rightarrow \Delta(1920) P_{33}$
- \PgDi  $\Rightarrow \Delta(1930) D_{35}$
- $\backslash PgDj \Rightarrow \Delta(1950) F_{37}$
- $\backslash PgDk \Rightarrow \Delta(2420) H_{3,11}$
- $\PgL \Rightarrow \Lambda$
- $\PagL \Rightarrow \overline{\Lambda}$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- $\backslash PbgL \Rightarrow \Lambda_b$
- \PgLa  $\Rightarrow \Lambda(1405) S_{01}$
- \PgLb  $\Rightarrow \Lambda(1520) D_{03}$
- $\bullet \ \ \backslash \mathrm{PgLc} \Rightarrow \Lambda(1600) \ \mathrm{P}_{01}$
- \PgLd  $\Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- \PgLf  $\Rightarrow \Lambda(1800) S_{01}$
- $\backslash PgLg \Rightarrow \Lambda(1810) P_{01}$
- \PgLh  $\Rightarrow \Lambda(1820) F_{05}$
- \PgLi  $\Rightarrow \Lambda(1830) D_{05}$
- \PgLj  $\Rightarrow \Lambda(1890) P_{03}$
- $\bullet \ \ \backslash \mathrm{PgLk} \Rightarrow \Lambda(2100) \ G_{07}$

- \PgL1  $\Rightarrow \Lambda(2110) F_{05}$
- \PgLm  $\Rightarrow \Lambda(2350) H_{09}$
- $\P0 \Rightarrow \Omega$
- $\backslash PgOpm \Rightarrow \Omega^{\pm}$
- $\backslash PgOmp \Rightarrow \Omega^{\mp}$
- $\PgOp \Rightarrow \Omega^+$
- $\backslash PgOm \Rightarrow \Omega^-$
- \PgOma  $\Rightarrow \Omega(2250)^-$
- new
  - $\verb|\PagO| \Rightarrow \overline{\Omega}$
- $\PagOp \Rightarrow \overline{\Omega}^+$
- $\PagOm \Rightarrow \overline{\Omega}^-$
- $\bullet \ \ \backslash \mathrm{PgS} \Rightarrow \Sigma$
- $\bullet \ \backslash \mathsf{PgSpm} \Rightarrow \Sigma^{\pm}$
- $\backslash PgSmp \Rightarrow \Sigma^{\mp}$
- $\bullet \ \backslash \mathrm{PgSm} \Rightarrow \Sigma^-$
- $\backslash PgSp \Rightarrow \Sigma^+$
- $\backslash PgSz \Rightarrow \Sigma^0$
- $\backslash PcgS \Rightarrow \Sigma_c$
- $\backslash PagSm \Rightarrow \overline{\Sigma}^-$
- $\backslash PagSp \Rightarrow \overline{\Sigma}^+$
- $\backslash PagSz \Rightarrow \overline{\Sigma}^0$
- $\backslash PacgS \Rightarrow \overline{\Sigma}_c$

- \PgSa  $\Rightarrow \Sigma(1385) P_{13}$
- \PgSb  $\Rightarrow \Sigma(1660) P_{11}$
- \PgSc  $\Rightarrow \Sigma(1670) D_{13}$
- $\backslash PgSd \Rightarrow \Sigma(1750) S_{11}$
- \PgSe  $\Rightarrow \Sigma(1775) D_{15}$
- $\backslash PgSf \Rightarrow \Sigma(1915) F_{15}$
- $\backslash PgSg \Rightarrow \Sigma(1940) D_{13}$
- $\backslash PgSh \Rightarrow \Sigma(2030) F_{17}$
- \PgSi  $\Rightarrow \Sigma(2050)$
- \PcgSi  $\Rightarrow \Sigma_c(2455)$
- $\PgU \Rightarrow \Upsilon$
- \PgUi  $\Rightarrow \Upsilon(1S)$
- \PgUa  $\Rightarrow \Upsilon(2S)$
- $\protect\operatorname{PgUb} \Rightarrow \Upsilon(3S)$
- \PgUc  $\Rightarrow \Upsilon(4S)$
- \PgUd  $\Rightarrow \Upsilon(10860)$
- \PgUe  $\Rightarrow \Upsilon(11020)$
- $\PX \Rightarrow \Xi$
- $\PgXp \Rightarrow \Xi^+$
- $\PXm \Rightarrow \Xi^-$
- $\PgXz \Rightarrow \Xi^0$
- $\PgXa \Rightarrow \Xi(1530) P_{13}$
- \PgXb  $\Rightarrow \Xi(1690)$
- \PgXc  $\Rightarrow \Xi(1820) D_{13}$

- $\backslash PgXd \Rightarrow \Xi(1950)$
- \PgXe  $\Rightarrow \Xi(2030)$
- $\PagXp \Rightarrow \overline{\Xi}^+$
- $\PagXm \Rightarrow \overline{\Xi}^-$
- $\PagXz \Rightarrow \overline{\Xi}^0$
- $\PcgXp \Rightarrow \Xi_c^+$
- $\bullet \ \ \backslash \texttt{PcgXz} \Rightarrow \Xi_c^0$
- $\backslash Pgf \Rightarrow \phi$
- \Pgfi  $\Rightarrow \phi(1020)$
- \Pgfa  $\Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- \Pgh  $\Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- $\bullet \ \backslash \mathtt{Pcgh} \Rightarrow \eta_{c}$
- $\bullet \ \ \mathbf{\backslash Pgha} \Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- \Pcghi  $\Rightarrow \eta_c(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- \Pgoa  $\Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$

- pion  $Pgp \Rightarrow \pi$
- charged pion  $\mathsf{Pgppm} \Rightarrow \pi^{\pm}$
- negative pion  $\protect\pro$
- neutral pion  $\mathsf{Pgpz} \Rightarrow \pi^0$
- \Pgpa  $\Rightarrow \pi(1300)$
- \Pgpii  $\Rightarrow \pi_2(1670)$
- resonance removed  $\mathsf{\backslash Pgr} \Rightarrow \rho$
- $\backslash Pgrp \Rightarrow \rho^+$
- $\backslash Pgrm \Rightarrow \rho^-$
- $\backslash Pgrpm \Rightarrow \rho^{\pm}$
- $\bullet \ \mathsf{\backslash Pgrmp} \Rightarrow \rho^{\mp}$
- $\backslash \mathrm{Pgrz} \Rightarrow \rho^0$
- new  $\begin{array}{c} \bullet \text{ new} \\ & Pgri \Rightarrow \rho(770) \end{array}$
- \Pgra  $\Rightarrow \rho(1450)$
- $\bullet \ \ \mathsf{\backslash Pgrb} \Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$

- \PJgy  $\Rightarrow$  J/ $\psi$
- \PJgyi  $\Rightarrow$  J/ $\psi(1S)$
- $\backslash Pgy \Rightarrow \psi$
- \Pgyii  $\Rightarrow \psi(2S)$
- \Pgya  $\Rightarrow \psi(3770)$
- \Pgyb  $\Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- \Pgyd  $\Rightarrow \psi(4415)$
- $\backslash PD \Rightarrow D$
- $\backslash PDpm \Rightarrow D^{\pm}$
- $\backslash PDmp \Rightarrow D^{\mp}$
- $\backslash PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\PDp \Rightarrow D^+$
- \PDst  $\Rightarrow$  D\*
- $\PaD \Rightarrow \overline{D}$
- $\PaDz \Rightarrow \overline{D}^0$
- $\PsDm \Rightarrow D_s^-$
- $\PsDp \Rightarrow D_s^+$
- $\PsDpm \Rightarrow D_s^{\pm}$
- $\PsDmp \Rightarrow D_s^{\mp}$

- \PsDst  $\Rightarrow D_s^*$
- \PsDipm  $\Rightarrow D_{s1}(2536)^{\pm}$
- $\backslash PsDimp \Rightarrow D_{s1}(2536)^{\mp}$
- \PDiz  $\Rightarrow$  D<sub>1</sub>(2420)<sup>0</sup>
- \PDstiiz  $\Rightarrow$  D<sub>2</sub>\*(2460)<sup>0</sup>
- \PDstpm  $\Rightarrow$  D\*(2010) $^{\pm}$
- $\backslash PDstmp \Rightarrow D^*(2010)^{\mp}$
- \PDstz  $\Rightarrow$  D\*(2010)<sup>0</sup>
- $\backslash PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\backslash PLmp \Rightarrow L^{\mp}$
- $\backslash PLz \Rightarrow L^0$
- \Paii  $\Rightarrow$   $a_2(1320)$
- $\bullet \ \ \backslash \mathbf{Pai} \Rightarrow a_1(1260)$
- $\Paz \Rightarrow a_0(980)$
- \Pbgcia  $\Rightarrow \chi_{\rm b1}(2{\rm P})$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{\rm b1}(1P)$
- \Pbgcza  $\Rightarrow \chi_{b0}(2P)$
- \Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- \Pbi  $\Rightarrow$   $b_1(1235)$
- \Phia  $\Rightarrow h_1(1170)$

- Higgsino
  - $\PSH \Rightarrow \widetilde{H}$
- positive Higgsino
  - $\texttt{\basel{PSHp}$\Rightarrow$\widetilde{H}^+$}$
- $\bullet\,$  negative Higgsino
  - $\mathtt{\backslash PSHm} \Rightarrow \widetilde{\mathrm{H}}^{-}$
- $\bullet\,$  charged Higgsino
  - $\texttt{\baseline{NPSHpm}{\Rightarrow}\widetilde{H}^{\pm}}$
- $\bullet\,$  charged Higgsino
  - $\texttt{\basel{PSHmp}$\Rightarrow$} \widetilde{H}^{\mp}$
- neutral Higgsino
  - $\PSHz \Rightarrow \widetilde{H}^0$
- wino
  - $\texttt{\baseline{NPSW}{\Rightarrow}\widetilde{W}}$
- positive wino
  - $\PSWp \Rightarrow \widetilde{W}^+$
- negative wino
  - $\texttt{\begin{tabular}{l} \textbf{PSWm} \Rightarrow \widetilde{W}^- \end{tabular}}$
- wino pm
  - $\texttt{\parbox{$\backslash$PSWpm$}} \Rightarrow \widetilde{W}^{\pm}$
- wino mp
  - $\texttt{\parbox{$\backslash$PSWmp}$} \Rightarrow \widetilde{W}^{\mp}$
- zino
  - $\PSZ \Rightarrow \widetilde{Z}$
- zino
  - $\PSZz \Rightarrow \widetilde{Z}^0$
- bino
  - $\mathtt{\ \ \ } \mathtt{PSB} \Rightarrow \widetilde{\mathrm{B}}$

- selectron
  - $\texttt{\ \ } \mathsf{PSe} \Rightarrow \widetilde{\mathrm{e}}$
- photino

$$\backslash \mathsf{PSgg} \Rightarrow \widetilde{\gamma}$$

 $\bullet$  smuon

$$\texttt{\parbox{$\backslash$PSgm}$} \Rightarrow \widetilde{\mu}$$

• sneutrino

$$\backslash \mathtt{PSgn} \Rightarrow \widetilde{\nu}$$

• stau

$$\texttt{\parbox{$\backslash$PSgt}$} \Rightarrow \widetilde{\tau}$$

• chargino/neutralino

$$\texttt{\parbox{$\backslash$PSgx}$} \Rightarrow \widetilde{\chi}$$

• chargino pm

$$\texttt{\parbox{$\backslash$PSgxpm$}} \Rightarrow \widetilde{\chi}^{\pm}$$

• chargino mp

$$\PSgxmp \Rightarrow \widetilde{\chi}^{\mp}$$

• neutralino

$$\PSgxz \Rightarrow \widetilde{\chi}^0$$

• lightest neutralino

$$\verb|\PSgxzi| \Rightarrow \widetilde{\chi}_1^0$$

• next-to-lightest neutralino

$$\verb|\PSgxzii| \Rightarrow \widetilde{\chi}_2^0$$

• gluino

$$\PSg \Rightarrow \widetilde{g}$$

• slepton (generic)

$$\mathtt{\ \ \ \ } \mathtt{\ \ } \widetilde{\ell}$$

• anti-slepton (generic)

$$\Pasl \Rightarrow \tilde{\ell}$$

 $\bullet$  squark (generic)

$$\backslash \mathtt{PSq} \Rightarrow \widetilde{q}$$

• anti-squark (generic)

$$\mathbf{\backslash PaSq} \Rightarrow \bar{\widetilde{q}}$$

 $\bullet\,$ down squark

$$\PSqd \Rightarrow \widetilde{d}$$

 $\bullet\,$ up squark

$$\mathbf{\P Squ} \Rightarrow \widetilde{\mathbf{u}}$$

 $\bullet$  strange squark

$$\texttt{\page} \Rightarrow \widetilde{s}$$

 $\bullet$  charm squark

$$\mathbf{\backslash PSqc} \Rightarrow \widetilde{c}$$

ullet bottom squark (sbottom)

$$\mathtt{\ \ \ \ \ \ }\widetilde{b}$$

• top squark (stop)  $\sim$ 

$$\texttt{\part} \Rightarrow \widetilde{t}$$

 $\bullet\,$ anti-down squark

 $\bullet\,$ anti-up squark

$$\PaSqu \Rightarrow \overline{\widetilde{u}}$$

 $\bullet\,$ anti-strange squark

$$\texttt{\ \ } \texttt{\ \ } \texttt{\ \ } \texttt{\ \ } \bar{\widetilde{s}}$$

• anti-charm squark

$$\PaSqc \Rightarrow \overline{\widetilde{c}}$$

 $\bullet\,$ anti-bottom squark

• anti-top squark (stop)

$$\PaSqt \Rightarrow \overline{\tilde{t}}$$

#### 2 Bold font

- $\PB \Rightarrow B$
- $\PBpm \Rightarrow B^{\pm}$
- $\backslash PBmp \Rightarrow B^{\mp}$
- $\backslash PBp \Rightarrow B^+$
- $\backslash PBm \Rightarrow B^-$
- $\backslash PBz \Rightarrow B^0$
- $\backslash PBst \Rightarrow B^*$
- $\backslash PdB \Rightarrow B_d^0$
- $\backslash PuB \Rightarrow B^+$
- $\backslash PcB \Rightarrow B_c^+$
- ullet \PsB  $\Rightarrow$   $B_s^0$
- ullet \PaB  $\Rightarrow \overline{B}$
- $\bullet \ \backslash \texttt{PaBz} \Rightarrow \overline{B}^0$
- $\backslash PadB \Rightarrow \overline{B}_d^0$
- $\PauB \Rightarrow B^-$
- $\bullet \ \backslash \texttt{PacB} \Rightarrow B_c^-$
- ullet \PasB  $\Rightarrow$   $\overline{B}_{s}^{0}$
- kaon  $\begin{tabular}{l} \bullet & \text{kaon} \\ \begin{tabular}{l} \bullet & \text{K} \\ \end{tabular}$

- K-long  $\begin{tabular}{l} \begin{tabular}{l} \$
- K-short  $\ \ \, \backslash \mathsf{PKzS} \Rightarrow \mathrm{K}^0_{\mathrm{S}}$
- $K \operatorname{star}$ \PKst  $\Rightarrow K^*$
- neutral anti-kaon  $\ \ \, \ \, \backslash \mathsf{PaKz} \Rightarrow \overline{K}^0$
- ullet \PKeiii  $\Rightarrow$   $\mathrm{K_{e3}}$
- ullet \PKgmiii  $\Rightarrow$   $\mathrm{K}_{\mu3}$
- $\bullet$  \PKzeiii  $\Rightarrow$   $\mathrm{K}_{\mathrm{e}3}^{0}$
- ullet \PKzgmiii  $\Rightarrow K_{\mu 3}^0$
- \PKia  $\Rightarrow$   $K_1(1400)$
- \PKii  $\Rightarrow K_2(1770)$

- \PKi  $\Rightarrow$  K<sub>1</sub>(1270)
- \PKsti  $\Rightarrow$  K\*(892)
- $\backslash PKsta \Rightarrow K^*(1370)$
- \PKstb  $\Rightarrow$  K\*(1680)
- \PKstiii  $\Rightarrow K_3^*(1780)$
- \PKstii  $\Rightarrow$  K<sub>2</sub>\*(1430)
- \PKstiv  $\Rightarrow K_4^*(2045)$
- \PKstz  $\Rightarrow$   $K_0^*(1430)$
- $\backslash PN \Rightarrow N$
- \PNa  $\Rightarrow$  N(1440)  $P_{11}$
- \PNb  $\Rightarrow$  N(1520) D<sub>13</sub>
- \PNc  $\Rightarrow$  N(1535)  $S_{11}$
- \PNe  $\Rightarrow$  N(1675)  $D_{15}$
- $\bullet \ \ \backslash \texttt{PNf} \ \Rightarrow \ N(1680) \ F_{15}$
- \PNg  $\Rightarrow$  N(1700)  $D_{13}$
- \PNh  $\Rightarrow$  N(1710)  $P_{11}$
- \PNi  $\Rightarrow$  N(1720)  $P_{13}$
- $\bullet \ \backslash \texttt{PNj} \Rightarrow N(2190) \ G_{17}$
- \PNk  $\Rightarrow$  N(2220)  $H_{19}$
- \PN1  $\Rightarrow$  N(2250)  $G_{19}$
- ullet \PNm  $\Rightarrow$  N(2600)  $I_{1,11}$

- gluon  $Pg \Rightarrow g$

- charged W boson  $\ \ \, \backslash \texttt{PWmp} \, \Rightarrow \, \mathbf{W}^{\mp}$

- \PWR  $\Rightarrow$  W<sub>R</sub>
- W-prime boson  $\PWpr \Rightarrow W'$
- Z boson  $\PZ \Rightarrow Z$

- left-right Z boson  $\ensuremath{\backslash \mathtt{PZLR}} \Rightarrow \mathbf{Z}_{\mathtt{LR}}$

- $\bullet \ \backslash \mathsf{PZgc} \Rightarrow \mathbf{Z}_\chi$
- \PZge  $\Rightarrow$   $\mathbf{Z}_{\eta}$
- ullet \PZgy  $\Rightarrow$   $\mathbf{Z}_{\psi}$
- $\PZi \Rightarrow Z_1$
- axion  $\ \ \, \ \, \backslash \mathsf{PAz} \, \Rightarrow \, A^0$
- explicitly neutral standard/heavy Higgs  $\label{eq:PHz} \ \ \, \to \, H^0$

- explicitly neutral pseudoscalar Higgs  $\label{eq:PAZ} \ \ \, \mathsf{PAZ} \, \Rightarrow \, \mathsf{A}^0$

- negative-charged Higgs
   \PHm ⇒ H⁻
- fermion  $\ensuremath{\backslash \mathrm{Pf}} \Rightarrow f$
- $\begin{array}{c} \bullet \text{ charged fermion} \\ {\tt \ \ \ \ \ \ } f^{\pm} \end{array}$
- ullet charged fermion  $\ensuremath{ackprox}{\mathsf{Pfmp}}\Rightarrow f^{\mp}$

- ullet anti-fermion  $\protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\operatorname{\begin{tabular}{l} \protect\end{tabular}} \protect\end{tabular}} \protect\begin{tabular}{l} \protect\e$
- lepton  $P1 \Rightarrow \ell$

- neutrino (for lepton ell) \Pgnl \Rightarrow \nu\_{\ell}
- generic anti-neutrino  $\protect\operatorname{\begin{tabular}{l} \protect\end{tabular}}$  \Pagn  $\Rightarrow ar{
  u}$
- anti-neutrino (for lepton ell) \Pagn1  $\Rightarrow \bar{\nu_{\ell}}$
- e plus/minus  $\ensuremath{\backslash \text{Pepm}} \Rightarrow e^{\pm}$
- e minus/plus $\ensuremath{\backslash Pemp} \Rightarrow e^{\mp}$
- electron  $\ensuremath{\backslash \text{Pem}} \Rightarrow e^-$
- positron  $\ensuremath{\backslash \text{Pep}} \Rightarrow e^+$
- muonic  $\protect\operatorname{\begin{tabular}{c} \protect\operatorname{\begin{tabular}{c} \protect\begin{tabular}{c} \protect\operatorname{\begin{tabular}{c} \protect\begin{tabular}{c} \pro$
- mu plus/minus  $\protect{\mathsf{NPgmpm}} \Rightarrow \mu^{\pm}$
- mu minus/plus  $Pgmmp \Rightarrow \mu^{\mp}$
- anti-muon  $\protect\operatorname{\mathsf{Pgmp}} \Rightarrow \mu^+$

- electron neutrino  $\ensuremath{\backslash \mathtt{Pgne}} \Rightarrow \nu_{\mathrm{e}}$
- muon neutrino  $\mathsf{Pgngm} \Rightarrow \nu_{\mu}$

- quark  $\Pq \Rightarrow q$

- up quark  $\Pqu \Rightarrow u$

- strange quark  $\Pqs \Rightarrow s$
- charm quark  $\ensuremath{\backslash \mathtt{Pqc}} \Rightarrow c$
- bottom quark  $\Pqb \Rightarrow b$
- top quark  $\Pqt \Rightarrow t$

- strange anti-quark  $\label{eq:paqs} \ \, \bar{s}$

- $\P b \Rightarrow b$
- $\Pqc \Rightarrow c$
- $\Pqd \Rightarrow d$
- $\P \Rightarrow s$
- \Pqt  $\Rightarrow$  t
- $\bullet \ \ \ \ \ \ \ \mathbf{v}$

- $\P \Rightarrow q$

- anti-top quark  $\land Pagt \Rightarrow \bar{t}$

- proton
   \Pp ⇒ p
- neutron  $\Pn \Rightarrow n$

- ullet \Pcgc  $\Rightarrow \chi_{
  m c}$
- \Pcgcii  $\Rightarrow \chi_{c2}(1P)$
- $\ensuremath{\,^{ ext{Pcgci}}} \Rightarrow \chi_{c1}(1P)$

- $\backslash Pcgcz \Rightarrow \chi_{c0}(1P)$
- \Pfia  $\Rightarrow$  f<sub>1</sub>(1390)
- $\backslash Pfib \Rightarrow f_1(1510)$
- \Pfiia  $\Rightarrow$  f<sub>2</sub>(1720)
- \Pfiib  $\Rightarrow$  f<sub>2</sub>(2010)
- \Pfiic  $\Rightarrow$  f<sub>2</sub>(2300)
- \Pfiid  $\Rightarrow$  f<sub>2</sub>(2340)
- \Pfiipr  $\Rightarrow$   $f_2'(1525)$
- $\backslash Pfii \Rightarrow f_2(1270)$
- \Pfiv  $\Rightarrow$   $f_4(2050)$
- $\backslash Pfi \Rightarrow f_1(1285)$
- $\Pfza \Rightarrow f_0(1400)$
- $\bullet \ \ {\tt \ \ } f_0(1590)$
- $\bullet \ \backslash \texttt{Pfz} \Rightarrow f_0(975)$
- $\bullet \ \backslash \texttt{PgD} \Rightarrow \Delta$
- ullet \PgDb  $\Rightarrow \Delta(1620) \, \mathrm{S}_{31}$
- \PgDc  $\Rightarrow \Delta(1700) D_{33}$
- \PgDd  $\Rightarrow$   $\Delta(1900) S_{31}$
- ullet \PgDe  $\Rightarrow \Delta(1905) \, \mathrm{F}_{35}$
- \PgDf  $\Rightarrow \Delta(1910) P_{31}$
- ullet \PgDh  $\Rightarrow \Delta(1920) P_{33}$
- ullet \PgDi  $\Rightarrow \Delta(1930) \ D_{35}$

- ullet \PgDj  $\Rightarrow$   $\Delta(1950)$   $\mathrm{F}_{37}$
- $\bullet$  \PgDk  $\Rightarrow$   $\Delta(2420)$   $H_{3,11}$
- \PgL  $\Rightarrow \Lambda$
- $\PagL \Rightarrow \overline{\Lambda}$
- $\bullet$  \PcgLp  $\Rightarrow$   $\Lambda_{\rm c}^+$
- \PbgL  $\Rightarrow \Lambda_{\rm b}$
- ullet \PgLa  $\Rightarrow$   $\Lambda(1405)$   $S_{01}$
- \PgLb  $\Rightarrow \Lambda(1520) D_{03}$
- \PgLc  $\Rightarrow \Lambda(1600) P_{01}$
- \PgLd  $\Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- \PgLf  $\Rightarrow \Lambda(1800) S_{01}$
- \PgLg  $\Rightarrow \Lambda(1810) P_{01}$
- ullet \PgLh  $\Rightarrow$   $\Lambda(1820)$   $F_{05}$
- ullet \PgLi  $\Rightarrow \Lambda(1830) \, D_{05}$
- $\bullet \ \backslash \mathrm{PgLj} \Rightarrow \Lambda(1890) \ \mathrm{P}_{03}$
- ullet \PgLk  $\Rightarrow$   $\Lambda(2100)~G_{07}$
- ullet \PgLl  $\Rightarrow$   $\Lambda(2110) \ F_{05}$
- ullet \PgLm  $\Rightarrow \Lambda(2350) H_{09}$
- $\backslash PgO \Rightarrow \Omega$
- \PgOpm  $\Rightarrow \Omega^{\pm}$
- $\bullet \ \backslash \mathrm{PgOmp} \Rightarrow \Omega^{\mp}$
- \PgOp  $\Rightarrow \Omega^+$
- $\bullet$  \PgOm  $\Rightarrow \Omega^-$

- \PgOma  $\Rightarrow \Omega(2250)^-$
- new

$$\Pag0 \Rightarrow \overline{\Omega}$$

- $\PagOp \Rightarrow \overline{\Omega}^+$
- ullet \PagOm  $\Rightarrow \overline{\Omega}^-$
- ullet \PgS  $\Rightarrow \Sigma$
- $\bullet$  \PgSpm  $\Rightarrow \Sigma^{\pm}$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ \Sigma^{\mp}$
- $\bullet \ \protect\operatorname{\mathsf{NPgSm}} \Rightarrow \Sigma^-$
- $\backslash PgSp \Rightarrow \Sigma^+$
- $\backslash PgSz \Rightarrow \Sigma^0$
- $\bullet$  \PcgS  $\Rightarrow$   $\Sigma_{\rm c}$
- $\bullet \ \backslash {\tt PagSm} \Rightarrow \overline{\Sigma}^-$
- $\PagSp \Rightarrow \overline{\Sigma}^+$
- ullet \PagSz  $\Rightarrow \overline{\Sigma}^0$
- ullet \PacgS  $\Rightarrow \overline{\Sigma}_{
  m c}$
- $\backslash PgSa \Rightarrow \Sigma(1385) P_{13}$
- $\PgSb \Rightarrow \Sigma(1660) P_{11}$
- $\protect\operatorname{\mathsf{PgSc}} \Rightarrow \Sigma(1670)\ D_{13}$
- $\PgSd \Rightarrow \Sigma(1750) S_{11}$
- \PgSe  $\Rightarrow \Sigma(1775) D_{15}$
- $\bullet \ \ \mathsf{\backslash PgSf} \Rightarrow \Sigma(1915) \ F_{15}$
- $\bullet \ \backslash \mathrm{PgSg} \Rightarrow \Sigma(1940) \ \mathrm{D}_{13}$

- $\PSh \Rightarrow \Sigma(2030) F_{17}$
- \PgSi  $\Rightarrow \Sigma(2050)$
- $\bullet$  \PcgSi  $\Rightarrow$   $\Sigma_{\rm c}(2455)$
- $\PgU \Rightarrow \Upsilon$
- \PgUi  $\Rightarrow \Upsilon(1S)$
- \PgUa  $\Rightarrow \Upsilon(2S)$
- \PgUb  $\Rightarrow \Upsilon(3S)$
- \PgUc  $\Rightarrow \Upsilon(4S)$
- \PgUd  $\Rightarrow \Upsilon(10860)$
- \PgUe  $\Rightarrow \Upsilon(11020)$
- $\backslash PgX \Rightarrow \Xi$
- $\protect\operatorname{PgXp} \Rightarrow \Xi^+$
- $\backslash PgXm \Rightarrow \Xi^-$
- $\PgXz \Rightarrow \Xi^0$
- $\backslash PgXa \Rightarrow \Xi(1530) P_{13}$
- $\backslash PgXb \Rightarrow \Xi(1690)$
- $\backslash PgXc \Rightarrow \Xi(1820) D_{13}$
- $\backslash PgXd \Rightarrow \Xi(1950)$
- \PgXe  $\Rightarrow \Xi(2030)$
- $\PagXp \Rightarrow \overline{\Xi}^+$
- $\PagXm \Rightarrow \overline{\Xi}^-$
- $\PagXz \Rightarrow \overline{\Xi}^0$
- $\backslash PcgXp \Rightarrow \Xi_c^+$
- $\PcgXz \Rightarrow \Xi_c^0$

- \Pgf  $\Rightarrow \phi$
- $\backslash Pgfi \Rightarrow \phi(1020)$
- \Pgfa  $\Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- ullet \Pgh  $\Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- ullet \Pcgh  $\Rightarrow \eta_{
  m c}$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- ullet \Pcghi  $\Rightarrow \eta_{
  m c}(1{
  m S})$
- ullet \Pgo  $\Rightarrow \omega$
- $\bullet \ \backslash \mathrm{Pgoi} \Rightarrow \omega(783)$
- $\backslash Pgoa \Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $\mathsf{Pgp} \Rightarrow \pi$

- negative pion  $\protect\pro$

- neutral pion  $\protect\operatorname{\begin{tabular}{l} \bullet \end{tabular}} \pi^0$
- \Pgpa  $\Rightarrow \pi(1300)$
- \Pgpii  $\Rightarrow \pi_2(1670)$
- resonance removed  $\ensuremath{\backslash \mathtt{Pgr}} \Rightarrow \rho$
- \Pgrp  $\Rightarrow 
  ho^+$
- \Pgrm  $\Rightarrow \rho^-$
- \Pgrpm  $\Rightarrow 
  ho^{\pm}$
- \Pgrmp  $\Rightarrow \rho^{\mp}$
- \Pgrz  $\Rightarrow \rho^0$
- new  $\ensuremath{\backslash \mathrm{Pgri}} \Rightarrow \rho(770)$
- $\bullet \ \backslash \texttt{Pgra} \Rightarrow \rho(1450)$
- $\backslash Pgrb \Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow 
  ho_3(1690)$
- \PJgy  $\Rightarrow$  J/ $\psi$
- \PJgyi  $\Rightarrow$  J/ $\psi(1S)$
- \Pgy  $\Rightarrow \psi$
- ullet \Pgyii  $\Rightarrow \psi(2\mathrm{S})$
- ullet \Pgya  $\Rightarrow \psi(3770)$
- \Pgyb  $\Rightarrow \psi(4040)$
- $\bullet \ \mathsf{\backslash Pgyc} \Rightarrow \psi(4160)$

- \Pgyd  $\Rightarrow \psi(4415)$
- $\backslash PD \Rightarrow D$
- $\backslash PDpm \Rightarrow D^{\pm}$
- $\backslash PDmp \Rightarrow D^{\mp}$
- $\backslash PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\PDp \Rightarrow D^+$
- $\backslash PDst \Rightarrow D^*$
- $\backslash PaD \Rightarrow \overline{D}$
- \PaDz  $\Rightarrow \overline{\mathrm{D}}^0$
- new 2005-07-08  $\label{eq:psd} \ \ \, \mathsf{PsD} \, \Rightarrow \, \mathsf{D_s}$
- $\backslash PsDm \Rightarrow D_s^-$
- \PsDp  $\Rightarrow$   $D_s^+$
- $\PsDpm \Rightarrow D_s^{\pm}$
- ullet \PsDmp  $\Rightarrow$   $D_s^{\mp}$
- $\backslash PsDst \Rightarrow D_s^*$
- $\backslash PsDipm \Rightarrow D_{s1}(2536)^{\pm}$
- $\backslash PsDimp \Rightarrow D_{s1}(2536)^{\mp}$
- \PDiz  $\Rightarrow$  D<sub>1</sub>(2420)<sup>0</sup>
- \PDstiiz  $\Rightarrow$  D<sub>2</sub>\*(2460)<sup>0</sup>
- \PDstpm  $\Rightarrow$  D\*(2010) $^{\pm}$
- $\backslash PDstmp \Rightarrow D^*(2010)^{\mp}$

- $\backslash PDstz \Rightarrow D^*(2010)^0$
- $\backslash PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\backslash PLmp \Rightarrow L^{\mp}$
- \PLz  $\Rightarrow$  L<sup>0</sup>
- $\Paii \Rightarrow a_2(1320)$
- $\Pai \Rightarrow a_1(1260)$
- $\Paz \Rightarrow a_0(980)$
- \Pbgcia  $\Rightarrow \chi_{\rm b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{\rm b2}(2{\rm P})$
- \Pbgcii  $\Rightarrow \chi_{\rm b2}(1P)$
- ullet \Pbgci  $\Rightarrow \chi_{
  m b1}(1{
  m P})$
- ullet \Pbgcza  $\Rightarrow \chi_{
  m b0}(2{
  m P})$
- $\backslash Pbgcz \Rightarrow \chi_{b0}(1P)$
- $\backslash Pbi \Rightarrow b_1(1235)$
- \Phia  $\Rightarrow$   $h_1(1170)$
- Higgsino  $\begin{tabular}{l} \label{eq:PSH} \ \Rightarrow \ \widetilde{H} \end{tabular}$
- positive Higgsino  $\label{eq:PSHp} \ \Rightarrow \ \widetilde{H}^+$
- charged Higgsino  $\ \ \, \backslash \mathtt{PSHpm} \, \Rightarrow \, \widetilde{H}^{\pm}$

- charged Higgsino  $\ \ \, \backslash \mathtt{PSHmp} \, \Rightarrow \, \widetilde{H}^{\mp}$
- neutral Higgsino  $\ \ \, \ \, \backslash PSHz \, \Rightarrow \, \widetilde{H}^0$
- wino  $\begin{tabular}{l} \bullet & \text{wino} \\ \begin{tabular}{l} \bullet & \widetilde{\mathbf{W}} \\ \end{tabular}$
- positive wino  $\ \ \, \backslash \mathtt{PSWp} \Rightarrow \widetilde{\mathbf{W}}^+$
- negative wino  $\PSWm \Rightarrow \widetilde{W}^-$
- wino pm  $\ \ \, \backslash \mathtt{PSWpm} \, \Rightarrow \, \widetilde{W}^{\pm}$
- wino mp  $\ \ \, \backslash \mathtt{PSWmp} \, \Rightarrow \, \widetilde{W}^{\mp}$
- zino  $\begin{tabular}{l} \bullet \ zino \\ \begin{tabular}{l} \bullet \ zin$
- bino  $\ \ \, \backslash \mathtt{PSB} \Rightarrow \widetilde{B}$
- selectron  $\ \ \, \backslash \mathsf{PSe} \Rightarrow \widetilde{\mathsf{e}}$
- photino  $\begin{tabular}{l} \label{eq:psgg} \begin{tabular}{l} \be$
- smuon  $\protect\operatorname{\mathsf{PSgm}} \Rightarrow \widetilde{\mu}$

- $\begin{array}{c} \bullet \ \ \text{chargino/neutralino} \\ \ \ \backslash \mathtt{PSgx} \, \Rightarrow \, \widetilde{\chi} \end{array}$
- chargino pm  $\PSgxpm \Rightarrow \widetilde{\chi}^{\pm}$
- chargino mp  $\ \ \, \backslash \mathtt{PSgxmp} \, \Rightarrow \, \widetilde{\chi}^{\mp}$
- $\begin{array}{c} \bullet \ \ \text{neutralino} \\ \\ \backslash \texttt{PSgxz} \, \Rightarrow \, \widetilde{\chi}^0 \end{array}$
- lightest neutralino  $\PSgxzi \Rightarrow \widetilde{\chi}_1^0$
- next-to-lightest neutralino  $\label{eq:psgzii} \ \ \ \ \ \ \ \widetilde{\chi}_2^0$

- anti-slepton (generic) \PaS1 \Rightarrow  $\tilde{\ell}$
- squark (generic)  $\PSq \Rightarrow \widetilde{q}$

ullet strange squark

$$\texttt{\parbox{$\backslash$PSqs$}} \Rightarrow \widetilde{s}$$

 $\bullet$  charm squark

$$\texttt{\parbox{$\backslash$PSqc}$} \Rightarrow \widetilde{c}$$

• bottom squark (sbottom)

$$\PSqb \Rightarrow \widetilde{\mathbf{b}}$$

• top squark (stop)

$$\P \rightarrow \widetilde{\mathbf{t}}$$

 $\bullet$  anti-down squark

$$\PaSqd \Rightarrow \overline{\widetilde{\mathbf{d}}}$$

• anti-up squark

$$\texttt{\paSqu} \Rightarrow \overline{\widetilde{\mathbf{u}}}$$

• anti-strange squark

$$\PaSqs \Rightarrow \overline{\widetilde{s}}$$

• anti-charm squark

$$\PaSqc \Rightarrow \overline{\widetilde{c}}$$

 $\bullet$  anti-bottom squark

$$\PaSqb \Rightarrow \overline{\widetilde{b}}$$

• anti-top squark (stop)

$$\PaSqt \Rightarrow \overline{\widetilde{t}}$$

## 3 Italic font

- $\backslash PB \Rightarrow B$

- $\backslash PBz \Rightarrow B^0$
- $\backslash PBst \Rightarrow B^*$
- $\backslash PdB \Rightarrow B_d^0$
- $\backslash PcB \Rightarrow B_c^+$

- \PasB  $\Rightarrow \overline{B}_s^0$
- kaon  $\begin{tabular}{l} \begin{tabular}{l} \b$
- charged kaon  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular$

- K-short\\PKzS \Rightarrow K\_S^0
- K star $\prescript{PKst} \Rightarrow K^*$
- anti-kaon\PaK \Rightarrow \overline{K}
- \PKeiii  $\Rightarrow K_{e3}$
- \PKgmiii  $\Rightarrow K_{\mu\beta}$
- \PKzeiii  $\Rightarrow K_{e3}^0$
- \PKzgmiii  $\Rightarrow K_{\mu 3}^0$
- \PKia  $\Rightarrow K_1(1400)$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$

- $\backslash PKi \Rightarrow K_1(1270)$
- \PKsti  $\Rightarrow K^*(892)$
- \PKsta  $\Rightarrow K^*(1370)$
- \PKstb  $\Rightarrow K^*(1680)$
- \PKstiii  $\Rightarrow K_3^*(1780)$
- \PKstii  $\Rightarrow K_2^*(1430)$
- \PKstiv  $\Rightarrow K_4^*(2045)$
- \PKstz  $\Rightarrow K_0^*(1430)$
- $\backslash PN \Rightarrow N$
- \PNa  $\Rightarrow N(1440) P_{11}$
- \PNb  $\Rightarrow N(1520) D_{13}$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- \PNe  $\Rightarrow N(1675) D_{15}$
- $\begin{subarray}{l} \begin{subarray}{l} \b$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{subarray}{c} \begin{subarray}{c} \b$
- \PN1  $\Rightarrow N(2250) G_{19}$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$

- gluon\P $g \Rightarrow g$
- photon\Pgg \Rightarrow \gamma
- $photon^*$ \\Pggx \Rightarrow \gamma^\*
- W boson\PW \Rightarrow W
- charged W boson  $\begin{tabular}{l} \begin{tabular}{l} \begin{tab$
- charged W boson  $\begin{tabular}{l} \bullet & W \end{tabular} V \begin{tabular}{l} \bullet & W \end{tabular} \begin{tabular}{l} \bullet & W \end{tab$
- W-minus\\PWm \Rightarrow W^-
- $\ensuremath{\backslash PWR} \Rightarrow W_R$
- W-prime boson  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular$
- Z boson\PZ \Rightarrow Z
- $neutral\ Z\ boson$ \\PZz \Rightarrow Z^0
- left-right Z boson  $\parbox{PZLR} \Rightarrow Z_{LR}$

- \PZgc  $\Rightarrow Z_{\chi}$
- $\PZge \Rightarrow Z_n$
- $\PZgy \Rightarrow Z_{\psi}$
- $\backslash PZi \Rightarrow Z_1$
- axion\PAz \Rightarrow A^0
- $standard/heavy\ Higgs$ \PH \Rightarrow H

- pseudoscalar Higgs $\PA \Rightarrow A$

- fermion\Pf \Rightarrow f

- anti-fermion\\Paf \Rightarrow \bar{f}
- lepton\Pl  $\Rightarrow \ell$

- anti-lepton\\Pal \Rightarrow \\{\bar{\ell}}

- electronic\Pe \Rightarrow e
- $e \ plus/minus$ \Pepm  $\Rightarrow e^{\pm}$
- $e \ minus/plus$ \Pemp  $\Rightarrow e^{\mp}$
- electron\Pem \Rightarrow e^-
- positron\Pep  $\Rightarrow e^+$
- muonic\Pqm \Rightarrow  $\mu$
- $mu \ plus/minus$ \\Pgmpm \Rightarrow \mu^\pm \rightarrow \pmu^\pm \rightarrow \pm \rightarrow \pm
- $mu \ minus/plus$ \\Pgmmp \Rightarrow \mu^\pi
- muon  $Pgmm \Rightarrow \mu^-$
- anti-muon\Pgmp \Rightarrow \mu^+
- tauonic\Pgt \Rightarrow \tau
- $tau \ plus/minus$ \Pgtpm \Rightarrow \tau^\pm

- $tau\ lepton$ \Pgtm  $\Rightarrow \tau^-$
- anti-tau\Pqtp \Rightarrow \tau^+

- $tau \ anti-neutrino$ \\Pagngt \Rightarrow \bar{\nu}\_{\tau}
- quark\Pq \Rightarrow q
- anti-quark\\Paq \Rightarrow \bar{q}
- $down \ quark$ \\Pqd \Rightarrow d
- $up \ quark$ \\Pqu \Rightarrow u
- $strange \ quark$ \Pqs \Rightarrow s

- $charm \ quark$ \Pqc \Rightarrow c
- $top\ quark$ \Pqt \Rightarrow t
- $up \ anti-quark$ \\Paqu \Rightarrow \bar{u}

- $\propty Pqb \Rightarrow b$
- $\protect\operatorname{Pqc} \Rightarrow c$
- $\backslash Pqd \Rightarrow d$
- $\protect\ Pqs \Rightarrow s$
- $\propty Pqt \Rightarrow t$
- $\propty Pqu \Rightarrow u$
- $\protect\ Pq \Rightarrow q$

- $anti-bottom \ quark$ \Paqb \Rightarrow \bar{b}
- $anti-charm \ quark$ \Paqc \Rightarrow \cap c
- $anti-down \ quark$ \\Paqd \Rightarrow \bar{d}
- $anti-top \ quark$ \Paqt \Rightarrow  $\bar{t}$
- $anti-up \ quark$ \\Paqu \Rightarrow \bar{u}
- anti-quark\\Paq \Rightarrow \bar{q}
- proton\\Pp \Rightarrow p
- neutron\Pn \Rightarrow n

- $\backslash Pcgc \Rightarrow \chi_c$
- \Pcgcii  $\Rightarrow \chi_{c2}(1P)$
- \Pcgci  $\Rightarrow \chi_{c1}(1P)$
- $\backslash Pcgcz \Rightarrow \chi_{c0}(1P)$

- $\backslash Pfia \Rightarrow f_1(1390)$
- \Pfib  $\Rightarrow f_1(1510)$
- \Pfiia  $\Rightarrow f_2(1720)$
- \Pfiib  $\Rightarrow f_2(2010)$
- \Pfiic  $\Rightarrow f_2(2300)$
- \Pfiid  $\Rightarrow f_2(2340)$
- \Pfiipr  $\Rightarrow f_2'(1525)$
- \Pfii  $\Rightarrow f_2(1270)$
- $\backslash Pfiv \Rightarrow f_4(2050)$
- $\backslash Pfi \Rightarrow f_1(1285)$
- $\backslash Pfza \Rightarrow f_0(1400)$
- $\prescript{Pfzb} \Rightarrow f_0(1590)$
- $\ensuremath{\mbox{\it Pfz}} \Rightarrow f_0(975)$
- $\protect\ PgD \Rightarrow \Delta$
- $\protect\ PgDa \Rightarrow \Delta(1232) P_{33}$
- $\backslash PgDb \Rightarrow \Delta(1620) S_{31}$
- $\backslash PgDc \Rightarrow \Delta(1700) D_{33}$
- $\backslash PgDd \Rightarrow \Delta(1900) S_{31}$
- \PgDe  $\Rightarrow \Delta(1905) F_{35}$
- $\backslash PgDf \Rightarrow \Delta(1910) P_{31}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{subarray}{c} \begin{subarray}{c} \b$

- $\backslash PgDk \Rightarrow \Delta(2420) H_{3,11}$
- $\backslash PgL \Rightarrow \Lambda$
- $\backslash PagL \Rightarrow \overline{\Lambda}$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- $\label{eq:PbgL} \rightarrow \varLambda_b$
- $\backslash PgLa \Rightarrow \Lambda(1405) S_{01}$
- $\backslash PgLc \Rightarrow \Lambda(1600) P_{01}$
- $\backslash PgLd \Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- $\backslash PgLf \Rightarrow \Lambda(1800) S_{01}$
- $\backslash PgLg \Rightarrow \Lambda(1810) P_{01}$

- $\protect\ PgLj \Rightarrow \Lambda(1890) P_{03}$
- $\protect\ PgLk \Rightarrow \Lambda(2100)\ G_{07}$
- \PgL1  $\Rightarrow \Lambda(2110) F_{05}$
- $\bullet \ \ \backslash \textit{PgLm} \Rightarrow \varLambda(2350) \ H_{09}$
- $\protect\ PgO \Rightarrow \Omega$
- $\backslash PqOpm \Rightarrow \Omega^{\pm}$
- $\ensuremath{\mathsf{NPgOmp}} \Rightarrow \ensuremath{\varOmega^{\mp}}$
- $\backslash PgOp \Rightarrow \Omega^+$
- $\PgOm \Rightarrow \Omega^-$

- new  $PagO \Rightarrow \overline{\Omega}$
- $\PagOp \Rightarrow \overline{\Omega}^+$
- \PagOm  $\Rightarrow \overline{\Omega}^-$
- $\backslash PgS \Rightarrow \Sigma$
- $\backslash PgSpm \Rightarrow \Sigma^{\pm}$
- $\propty PqSmp \Rightarrow \propty \Sigma^{\mp}$
- $\backslash PgSm \Rightarrow \Sigma^-$
- $\protect\operatorname{PgSp} \Rightarrow \protect\ensuremath{\Sigma^+}$
- $\backslash PgSz \Rightarrow \Sigma^0$
- $\backslash PcgS \Rightarrow \Sigma_c$
- $\backslash PaqSm \Rightarrow \overline{\Sigma}^-$
- $\PagSp \Rightarrow \overline{\Sigma}^+$
- \PaqSz  $\Rightarrow \bar{\Sigma}^0$
- \PacgS  $\Rightarrow \overline{\Sigma}_c$
- $\backslash PgSa \Rightarrow \Sigma(1385) P_{13}$
- $\backslash PqSb \Rightarrow \Sigma(1660) P_{11}$
- $\backslash PqSc \Rightarrow \Sigma(1670) D_{13}$
- $\backslash PgSd \Rightarrow \Sigma(1750) S_{11}$
- $\backslash PgSe \Rightarrow \Sigma(1775) D_{15}$
- $\backslash PgSf \Rightarrow \Sigma(1915) F_{15}$

- \PgSi  $\Rightarrow \Sigma(2050)$
- $\ensuremath{\mathsf{PcgSi}} \Rightarrow \ensuremath{\varSigma_c(2455)}$
- $\backslash PgU \Rightarrow \Upsilon$
- $\prescript{PgUi} \Rightarrow \Upsilon(1S)$
- $\propty PgUa \Rightarrow \Upsilon(2S)$
- $\backslash PgUb \Rightarrow \Upsilon(3S)$
- $\backslash PgUc \Rightarrow \Upsilon(4S)$
- \PgUd  $\Rightarrow \Upsilon(10860)$
- \PgUe  $\Rightarrow \Upsilon(11020)$
- $\protect\ PgX \Rightarrow \Xi$
- $\backslash PqXp \Rightarrow \Xi^+$
- $\backslash PqXm \Rightarrow \Xi^-$
- $\backslash PgXz \Rightarrow \Xi^0$
- $\protect\operatorname{PgXa} \Rightarrow \Xi(1530) P_{13}$
- $\prescript{PgXb} \Rightarrow \Xi(1690)$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- $\protect\operatorname{PgXd} \Rightarrow \Xi(1950)$
- $\prescript{PgXe} \Rightarrow \Xi(2030)$
- $\PagXp \Rightarrow \overline{\Xi}^+$
- \PagXz  $\Rightarrow \bar{\Xi}^0$
- $\ensuremath{\backslash PcgXp} \Rightarrow \Xi_c^+$
- $\backslash PcgXz \Rightarrow \Xi_c^0$
- $\protect\ Pgf \Rightarrow \phi$

- $\backslash Pgfi \Rightarrow \phi(1020)$
- $\backslash Pgfa \Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- $\propty Pgh \Rightarrow \eta$
- $\backslash Pghpr \Rightarrow \eta'$
- \Pcgh  $\Rightarrow \eta_c$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- \Pcghi  $\Rightarrow \eta_c(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- \Pgoa  $\Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $Pgp \Rightarrow \pi$
- charged pion  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular$

- $\propty Pgpa \Rightarrow \pi(1300)$
- $Pgpii \Rightarrow \pi_2(1670)$
- resonance removed  $\parbox{$\backslash$Pgr$} \Rightarrow \rho$
- $\protect\operatorname{Pgrp} \Rightarrow \rho^+$
- $\backslash Pgrm \Rightarrow \rho^-$
- $\protect\ Pgrpm \Rightarrow \rho^{\pm}$
- $\ensuremath{\backslash \textit{Pgrmp}} \Rightarrow \ensuremath{\rho^{\mp}}$
- \Pgrz  $\Rightarrow \rho^0$
- new\Pgri \Rightarrow \rho(770)
- \Pgra  $\Rightarrow \rho(1450)$
- \Pgrb  $\Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$
- \PJgy  $\Rightarrow J/\psi$
- \PJgyi  $\Rightarrow J/\psi(1S)$
- $\propty Pgy \Rightarrow \psi$
- \Pgyii  $\Rightarrow \psi(2S)$
- \Pgya  $\Rightarrow \psi(3770)$
- $\protect\ Pgyb \Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- $\ensuremath{\backslash Pgyd} \Rightarrow \psi(4415)$

- $\backslash PD \Rightarrow D$
- $\protect\operatorname{PDpm} \Rightarrow D^{\pm}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\backslash PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\backslash PDp \Rightarrow D^+$
- \PDst  $\Rightarrow D^*$
- $\PaD \Rightarrow \overline{D}$
- $\backslash PaDz \Rightarrow \overline{D}^0$
- $new \ 2005-07-08$ \PsD \Rightarrow D\_s
- $\backslash PsDm \Rightarrow D_s^-$
- $\ensuremath{\backslash \textit{PsDpm}} \Rightarrow D_s^{\pm}$
- $\ensuremath{\backslash \textit{PsDmp}} \Rightarrow D_s^{\mp}$
- \PsDs $t \Rightarrow D_s^*$
- $\backslash PsDipm \Rightarrow D_{s1}(2536)^{\pm}$
- $\ensuremath{\mbox{\it PsDimp}} \Rightarrow D_{s1}(2536)^{\mp}$
- $\backslash PDiz \Rightarrow D_1(2420)^0$
- \PDstiiz  $\Rightarrow D_2^*(2460)^0$
- \PDstpm  $\Rightarrow D^*(2010)^{\pm}$
- \PDstmp  $\Rightarrow D^*(2010)^{\mp}$
- \PDstz  $\Rightarrow$   $D^*(2010)^0$

- $\backslash PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\backslash PLz \Rightarrow L^0$
- $\backslash Pai \Rightarrow a_1(1260)$
- $\backslash Paz \Rightarrow a_0(980)$
- \Pbgcia  $\Rightarrow \chi_{b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- $\backslash Pbgcza \Rightarrow \chi_{b0}(2P)$
- \Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- $\backslash Pbi \Rightarrow b_1(1235)$
- \Phia  $\Rightarrow h_1(1170)$
- Higgsino\PSH  $\Rightarrow \widetilde{H}$

- $\begin{array}{c} \bullet \ \ charged \ Higgsino \\ \verb|\| PSHmp \Rightarrow \widetilde{H}^\mp \end{array}$

- wino  $\PSW \Rightarrow \widetilde{W}$
- negative wino  $\label{eq:pswm} \ \ \ \overset{}{\text{NPSWm}} \Rightarrow \ \widetilde{W}^-$
- wino pm  $\begin{tabular}{ll} \bullet & wino \ pm \\ \begin{tabular}{ll} \begin{tabular}{l$
- $\begin{array}{c} \bullet \ \ wino \ mp \\ \ \, \backslash \textit{PSWmp} \ \Rightarrow \ \widetilde{W}^{\mp} \end{array}$
- zino\PSZ \Rightarrow  $\widetilde{Z}$
- zino\PSZz  $\Rightarrow \widetilde{Z}^0$
- bino  $\c PSB \Rightarrow \widetilde{B}$
- selectron\PSe  $\Rightarrow \widetilde{e}$
- photino\PSgg  $\Rightarrow \widetilde{\gamma}$
- smuon\\PSgm \Rightarrow  $\widetilde{\mu}$
- sneutrino\PSgn  $\Rightarrow \widetilde{\nu}$
- stau\PSqt  $\Rightarrow \widetilde{\tau}$

- chargino/neutralino\PSgx \Rightarrow  $\widetilde{\chi}$
- chargino pm\PSgxpm  $\Rightarrow \widetilde{\chi}^{\pm}$
- chargino mp  $\begin{picture}(100,0) \put(0,0){\line(1,0){100}} \put(0,$
- neutralino\PSgxz \Rightarrow  $\widetilde{\chi}^0$

- gluino\PSg  $\Rightarrow \widetilde{g}$

- squark (generic)\PSq \Rightarrow  $\widetilde{q}$
- $down \ squark$ \\PSqd \Rightarrow  $\widetilde{d}$
- $up \ squark$ \\PSqu \Rightarrow \iii
- $strange\ squark$ \PSqs \Rightarrow \sigma

- charm squark  $\parbox{\scalebox{$\backslash$PSqc$}} \Rightarrow \widetilde{c}$
- $\begin{array}{c} \bullet \ \ bottom \ squark \ (sbottom) \\ \verb|\| \mathsf{PSqb} \Rightarrow \ \widetilde{b} \end{array}$
- top squark (stop)  $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- ullet anti-up squark

- $\begin{array}{c} \bullet \ \ anti\text{-}strange \ squark \\ \verb|\| PaSqs \Rightarrow \bar{\tilde{s}} \end{array}$
- anti-charm squark  $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- anti-top squark (stop)  $\begin{tabular}{l} \begin{tabular}{l} \beg$

#### 4 Bold italic font

• 
$$\ensuremath{\backslash PBpm} \Rightarrow B^{\pm}$$

$$ullet$$
 \PBmp  $\Rightarrow$   $B^{\mp}$ 

• 
$$\protect\operatorname{PBp} \Rightarrow B^+$$

• 
$$\backslash PBz \Rightarrow B^0$$

$$ullet$$
 \\PsB  $\Rightarrow$   $B_s^0$ 

$$ullet$$
 \PaB  $\Rightarrow$   $ar{B}$ 

$$ullet$$
 \\Pa\Bz  $\Rightarrow$   $ar{B}^{\,0}$ 

$$ullet$$
 \\PadB  $\Rightarrow$   $ar{B}_d^{\,0}$ 

$$ullet$$
 \PacB  $\Rightarrow$   $B_c^-$ 

$$ullet$$
 \\PasB  $\Rightarrow$   $ar{B}_s^{\,0}$ 

• 
$$kaon$$
 $\protect\pr$ 

$$ullet$$
 K-long  $ackslash extit{PKzL} \Rightarrow extit{K}_L^0$ 

• 
$$K\text{-}short$$
  
\\PKzS \Rightarrow K\_S^0

• 
$$K star$$
  
\PKst  $\Rightarrow K^*$ 

$$ullet$$
 \PKeiii  $\Rightarrow$   $K_{e3}$ 

$$ullet$$
 \PKgmiii  $\Rightarrow$   $K_{\mu 3}$ 

$$ullet$$
 \PKzeiii  $\Rightarrow$   $K_{e3}^0$ 

$$ullet$$
 \PKzgmiii  $\Rightarrow K_{\mu 3}^0$ 

• 
$$\prescript{PKia} \Rightarrow K_1(1400)$$

$$ullet$$
 \PKii  $\Rightarrow K_2(1770)$ 

- \PKsti  $\Rightarrow K^*(892)$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- \PKstiii  $\Rightarrow K_3^*(1780)$
- $\bullet$  \PKstiv  $\Rightarrow$   $K_4^*(2045)$
- $\backslash PKstz \Rightarrow K_0^*(1430)$
- $\backslash PN \Rightarrow N$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\bullet$  \PNb  $\Rightarrow$   $N(1520) D_{13}$
- $\propty PNc \Rightarrow N(1535) S_{11}$
- $\bullet \ \ {\ } \ \ {\ } \ \ N(1650) \ S_{\, 11}$
- ullet \\ PNe  $\Rightarrow$  N(1675)  $D_{15}$
- ullet \PNf  $\Rightarrow$  N(1680)  $F_{15}$
- \PNg  $\Rightarrow$  N(1700)  $D_{13}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- \PNj  $\Rightarrow$  N(2190)  $G_{17}$
- ullet \\ \textit{PNk} \Rightarrow N(2220) H \_{19}
- $\bullet$  \PN1  $\Rightarrow$  N(2250)  $G_{19}$
- $\bullet \ \ | \textit{PNm} \Rightarrow N(2600) \ I_{1,11}$

- gluon  $Pg \Rightarrow g$

- W boson  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular}{l}$
- charged W boson  $\begin{tabular}{l} \bullet & PWpm \Rightarrow & W^{\pm} \end{tabular}$
- ullet charged W boson  $lacksquare{P Wmp} \Rightarrow W^{\mp}$
- W-plus $PWp \Rightarrow W^+$
- W-minus  $PWm \Rightarrow W^-$
- W-prime boson  $\parbox{PWpr} \Rightarrow W'$
- Z boson\PZ \Rightarrow Z
- $neutral \ Z \ boson$  $PZz \Rightarrow Z^0$
- ullet left-right Z boson ackslash extstyle ext

- \PZgc  $\Rightarrow$   $Z_{\chi}$
- \PZge  $\Rightarrow$   $Z_n$
- $PZi \Rightarrow Z_1$
- axion  $PAz \Rightarrow A^0$
- $standard/heavy\ Higgs$ \\rightarrow H\Rightarrow H
- explicitly neutral standard/heavy Higgs  $|PHz| \Rightarrow H^0$
- light Higgs  $Ph \Rightarrow h$
- explicitly neutral light Higgs  $|Phz| \Rightarrow h^0$
- ullet explicitly neutral pseudoscalar Higgs  $igl| PAz \Rightarrow A^0$
- $\bullet \ \ charged \ \ Higgs \\ \ \, \backslash \textit{PHmp} \ \Rightarrow \ \ H^{\mp}$

- fermion\Pf \Rightarrow f

- negative fermion  $\c Pfm \Rightarrow f^-$
- lepton\Pl  $\Rightarrow \ell$

- generic neutrino  $\parbox{$\backslash$Pgn$} \Rightarrow \nu$

- anti-neutrino (for lepton ell)  $|Pagnl \Rightarrow \bar{\nu_{\ell}} |$
- electronic\Pe \Rightarrow e
- $e \ plus/minus$ \Pepm  $\Rightarrow e^{\pm}$
- $e \ minus/plus$ \Pemp  $\Rightarrow e^{\mp}$
- electron\Pem  $\Rightarrow e^-$
- positron\Pep  $\Rightarrow e^+$
- muonic  $\Pgm \Rightarrow \mu$
- $mu \ plus/minus$ \Pampm  $\Rightarrow \mu^{\pm}$
- $mu \ minus/plus$ \Pammp  $\Rightarrow \mu^{\mp}$
- muon  $\parbox{$\backslash$Pgmm$} \Rightarrow \mu^-$
- $\begin{array}{c} \bullet \ \ anti{-}muon \\ \\ \backslash \textit{Pgmp} \ \Rightarrow \ \mu^+ \end{array}$
- tauonic\Pgt  $\Rightarrow \tau$

- $tau\ plus/minus$   $\land Pgtpm \Rightarrow au^{\pm}$
- $tau\ minus/plus$   $\land Pqtmp \Rightarrow au^{\mp}$
- $tau\ lepton$ \Pgtm  $\Rightarrow au^-$
- anti-tau\Pqtp \Rightarrow \tau^+
- $muon\ neutrino$ \\Pgngm \Rightarrow \nu\_{\mu}
- $tau\ neutrino$ \Pgngt \Rightarrow \nu\_{\tau}
- electron anti-neutrino  $|Pagne| \Rightarrow \bar{\nu_e}$
- $tau\ anti-neutrino$ \Pagngt  $\Rightarrow \bar{
  u_{\tau}}$
- quark\Pq \Rightarrow q
- anti-quark\\Paq \Rightarrow \bar{q}
- $down \ quark$ \\Pqd \Rightarrow d
- $up \ quark$ \\Pqu \Rightarrow u

- $strange \ quark$ \Pqs  $\Rightarrow s$
- $charm \ quark$ \Pqc \Rightarrow c
- $top \ quark$ \\Pqt \Rightarrow t
- $down \ anti-quark$ \\\Paqd \Rightarrow \bar{d}
- $up \ anti-quark$ \\\\Paqu \Rightarrow \bar{u}
- $strange\ anti-quark$  $\Paqs \Rightarrow \bar{s}$
- $charm\ anti-quark$ \Paqc \Rightarrow  $\bar{c}$
- $top \ anti-quark$ \\Paqt \Rightarrow \bar{t}
- $\propty Pqb \Rightarrow b$
- $\protect\ Pqc \Rightarrow c$
- $\propty Pqd \Rightarrow d$
- $\protect\ Pqs \Rightarrow s$
- $\proptyper \proptyper \propty$
- $\propty Pqu \Rightarrow u$

- $\backslash Pq \Rightarrow q$
- $anti-charm \ quark$ \\Paqc \Rightarrow \cap c
- $anti-down \ quark$ \\Paqd \Rightarrow \bar{d}
- anti-strange quark\Paqs  $\Rightarrow \bar{s}$
- $anti-top\ quark$ \\\Paqt\\\\\\part\| \in \tau\
- $anti-up \ quark$ \\\Paqu \Rightarrow \bar{u}
- anti-quark\\Paq \Rightarrow \bar{q}
- proton\Pp \Rightarrow p
- neutron\Pn \Rightarrow n

- \Pcgc  $\Rightarrow \chi_c$
- \Pcgcii  $\Rightarrow \chi_{c2}(1P)$
- \Pcgci  $\Rightarrow \chi_{c1}(1P)$

- ullet \Pcgcz  $\Rightarrow \chi_{c0}(1P)$
- ullet \Pfib  $\Rightarrow f_1(1510)$
- ullet \Pfiia  $\Rightarrow f_2(1720)$
- ullet \Pfiib  $\Rightarrow f_2(2010)$
- $\backslash Pfiic \Rightarrow f_2(2300)$
- ullet \Pfiid  $\Rightarrow f_2(2340)$
- ullet \Pfipr  $\Rightarrow f_2'(1525)$
- $\backslash Pfii \Rightarrow f_2(1270)$
- ullet \Pfiv  $\Rightarrow f_4(2050)$
- $\backslash Pfi \Rightarrow f_1(1285)$
- ullet \Pfza  $\Rightarrow f_0(1400)$
- ullet \Pfzb  $\Rightarrow f_0(1590)$
- ullet \Pfz  $\Rightarrow f_0(975)$
- $\protect\ PgD \Rightarrow \Delta$
- $\propty PgDa \Rightarrow \Delta(1232) P_{33}$
- \PgDc  $\Rightarrow$   $\Delta(1700)$   $D_{33}$
- ullet \\PgDd  $\Rightarrow$  \Delta(1900)  $S_{31}$
- ullet \PgDe  $\Rightarrow$   $\Delta(1905)$   $F_{35}$
- $\propty PgDf \Rightarrow \Delta(1910) P_{31}$
- ullet \PgDh  $\Rightarrow$   $\Delta(1920)$   $P_{33}$
- ullet \PgDi  $\Rightarrow$   $\Delta(1930)$   $D_{35}$

- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- $\backslash PgDk \Rightarrow \Delta(2420) H_{3,11}$
- $\backslash PgL \Rightarrow \Lambda$
- $\backslash PagL \Rightarrow \overline{\Lambda}$
- $\protect\operatorname{PcgLp} \Rightarrow \protect\Lambda_c^+$
- $\backslash PbgL \Rightarrow \Lambda_b$
- ullet \rangle PgLb  $\Rightarrow$   $\Lambda(1520)$   $D_{03}$
- ullet \PgLc  $\Rightarrow$   $\Lambda(1600)$   $P_{01}$
- $\prescript{PgLd} \Rightarrow \Lambda(1670) S_{01}$
- ullet \PgLe  $\Rightarrow$   $\Lambda(1690)$   $D_{03}$
- ullet \PgLf  $\Rightarrow$   $\Lambda(1800)$   $S_{01}$
- $\prescript{PgLg} \Rightarrow \Lambda(1810) P_{01}$
- ullet \PgLh  $\Rightarrow$   $\Lambda(1820)$   $F_{05}$
- ullet \PgLi  $\Rightarrow$   $\Lambda(1830)$   $D_{05}$
- ullet \\ \PgLk \Rightarrow \Lambda(2100) \,G\_{07}
- \PgLl  $\Rightarrow$   $\Lambda(2110)$   $F_{05}$
- ullet \PgLm  $\Rightarrow$   $\Lambda(2350)$   $H_{09}$
- $\bullet \ \ \backslash \textit{PgO} \Rightarrow \ \varOmega$
- $\protect\operatorname{PgOpm} \Rightarrow \protect\Omega^\pm$
- ullet \PgOmp  $\Rightarrow \Omega^{\mp}$
- $\protect\operatorname{PgOp} \Rightarrow \Omega^+$
- ullet \PgOm  $\Rightarrow \Omega^-$

- new  $PagO \Rightarrow \overline{\Omega}$
- \PagOp  $\Rightarrow \overline{\Omega}^+$
- \PagOm  $\Rightarrow \overline{\Omega}^-$
- $\backslash PqSpm \Rightarrow \Sigma^{\pm}$
- $\bullet$  \PqSmp  $\Rightarrow$   $\Sigma^{\mp}$
- $\bullet$  \PgSm  $\Rightarrow$   $\Sigma^-$
- $\propty PqSp \Rightarrow \propty \Sigma^+$
- $\propty PqSz \Rightarrow \Sigma^0$
- ullet \PcgS  $\Rightarrow$   $\Sigma_c$
- $\bullet \ \backslash \textit{PagSm} \Rightarrow \, \bar{\varSigma}^-$
- \PaqSp  $\Rightarrow \bar{\Sigma}^+$
- ullet \PacgS  $\Rightarrow$   $\overline{\Sigma}_c$
- $\bullet \ \ | \textit{PgSb} \ \Rightarrow \ \varSigma(\textit{1660}) \ P_{\textit{11}}$
- ullet \PgSc  $\Rightarrow$   $\Sigma(1670)$   $D_{13}$
- \PgSe  $\Rightarrow \Sigma(1775) D_{15}$

- $\backslash PgSh \Rightarrow \Sigma(2030) F_{17}$
- ullet \PgSi  $\Rightarrow$  \Sigma(2050)
- ullet \\ \PcgSi \Rightarrow \Sigma\_c(2455)
- $\backslash PgU \Rightarrow \Upsilon$
- $\prescript{PgUi} \Rightarrow \Upsilon(1S)$
- $\prescript{PgUa} \Rightarrow \Upsilon(2S)$
- \PgUb  $\Rightarrow \Upsilon(3S)$
- $\backslash PgUc \Rightarrow \Upsilon(4S)$
- $\prescript{PgUd} \Rightarrow \Upsilon(10860)$
- $\propty PgUe \Rightarrow \Upsilon(11020)$
- $\protect\ PgX \Rightarrow \Xi$
- $\backslash PqXp \Rightarrow \Xi^+$
- $\protect\operatorname{PgXm} \Rightarrow \Xi^-$
- $\propty PgXz \Rightarrow \Xi^0$
- ullet \PgXa  $\Rightarrow$   $\Xi(1530)$   $P_{13}$
- ullet \PgXb  $\Rightarrow$   $\Xi(1690)$
- ullet \\PgXc  $\Rightarrow$   $\varXi(1820)$   $D_{13}$
- ullet \\Pg\text{Xd}  $\Rightarrow$  \(\mathcal{E}(1950)\)
- \PgXe  $\Rightarrow \Xi(2030)$
- $\PagXm \Rightarrow \bar{\Xi}^-$
- $\PagXz \Rightarrow \overline{\Xi}^{\,0}$
- $\protect\operatorname{PcgXp} \Rightarrow \Xi_c^+$
- ullet \\PcgXz  $\Rightarrow$   $\Xi_c^0$

- $\propty Pgf \Rightarrow \phi$
- $\prescript{Pgfi} \Rightarrow \phi(1020)$
- $\backslash Pgfa \Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- $\propty Pgh \Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- \Pcgh  $\Rightarrow \eta_c$
- $\prescript{Pgha} \Rightarrow \eta(1295)$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- ullet \Pghpri  $\Rightarrow \eta'(958)$
- ullet \Pcghi  $\Rightarrow \eta_c(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- $\prescript{Pgoa} \Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $\parbox{$\backslash$Pgp$} \Rightarrow \pi$

- $\backslash Pgpa \Rightarrow \pi(1300)$
- ullet \Pgpii  $\Rightarrow \pi_2(1670)$
- \Pgrp  $\Rightarrow \rho^+$
- $\protect\ Pgrm \Rightarrow 
  ho^-$
- $\protect\ Pgrpm \Rightarrow 
  ho^{\pm}$
- $\protect\ Pgrmp \Rightarrow 
  ho^{\mp}$
- \Pgrz  $\Rightarrow \rho^0$
- new\Pgri \Rightarrow \rho(770)
- \Pgra  $\Rightarrow \rho(1450)$
- \Pgrb  $\Rightarrow \rho(1700)$
- ullet \Pgriii  $\Rightarrow 
  ho_3(1690)$
- $\prescript{PJgyi} \Rightarrow \prescript{J/\psi(1S)}$
- \Pgy  $\Rightarrow \psi$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \psi(2S)$
- $\prescript{Pgya} \Rightarrow \psi(3770)$
- $\propty Pgyb \Rightarrow \psi(4040)$
- $\prescript{Pgyc} \Rightarrow \psi(4160)$

- $\parbox{$\backslash$Pgyd} \Rightarrow \psi(4415)$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ D$
- $\bullet \ \ \ \ \ \ \ D^{\pm}$
- ullet \PDmp  $\Rightarrow$   $D^{\mp}$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ D^0$
- $\bullet \ \ \ \ \ \ \ D^-$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ D^+$
- \PDst  $\Rightarrow$   $D^*$

- new~2005-07-08\PsD  $\Rightarrow D_s$
- ullet \PsDm  $\Rightarrow$   $D_s^-$
- ullet \PsDp  $\Rightarrow$   $D_s^+$
- ullet \\PsDpm  $\Rightarrow$   $D_s^{\pm}$
- ullet \PsDmp  $\Rightarrow$   $D_s^{\mp}$
- ullet \\ PsDipm  $\Rightarrow D_{s1}(2536)^{\pm}$
- ullet \\ \textit{PDiz} \Rightarrow D\_1(2420)^0
- ullet \PDstiiz  $\Rightarrow$   $D_2^*(2460)^0$
- ullet \\PDstpm  $\Rightarrow$   $D^*(2010)^{\pm}$
- $\bullet$  \PDstmp  $\Rightarrow$   $D^*(2010)^{\mp}$

- \PDstz  $\Rightarrow D^*(2010)^0$

- ullet \PLmp  $\Rightarrow$   $oldsymbol{L}^{\mp}$

- \Pbgcia  $\Rightarrow \chi_{b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- \Pbgcza  $\Rightarrow \chi_{b0}(2P)$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{ll} \begin{tabular}{ll} \bullet \begin{tabular}{ll} \begin{tabular}{ll}$
- \Phia  $\Rightarrow h_1(1170)$
- Higgsino $\parbox{PSH} \Rightarrow \widetilde{H}$
- $\begin{array}{c} \bullet \ \ positive \ \ Higgsino \\ \verb|\| PSHp \Rightarrow \widetilde{H}^+ \end{array}$
- ullet charged Higgsino  $ackslash ext{PSHpm} \Rightarrow \widetilde{H}^{\pm}$

- $ullet neutral \ Higgsino$   $lacksquare PSHz \Rightarrow \widetilde{H}^0$
- $ullet \ wino \ \ \ \ \ \ \ \widetilde{W} \ \Rightarrow \ \widetilde{W}$
- $\begin{array}{c} \bullet \ \ positive \ wino \\ \backslash \textit{PSWp} \ \Rightarrow \ \widetilde{W}^+ \end{array}$
- negative wino  $\ \ \ \ \ \ \ \ \ \ \ \widetilde{W}^-$
- $\begin{array}{c} \bullet \ \ wino \ pm \\ \\ \backslash {\it PSWpm} \Rightarrow \ \widetilde{W}^{\pm} \end{array}$
- $\begin{array}{c} \bullet \ \ wino \ mp \\ \\ \backslash {\it PSWmp} \ \Rightarrow \ \widetilde{W}^{\mp} \end{array}$
- zino\PSZ  $\Rightarrow \widetilde{Z}$
- zino  $PSZz \Rightarrow \widetilde{Z}^{0}$
- selectron\PSe  $\Rightarrow \tilde{e}$
- photino\\PSgg \Rightarrow \gamma
- smuon  $\PSqm \Rightarrow \widetilde{\mu}$
- sneutrino\PSqn  $\Rightarrow \widetilde{\nu}$

- stau  $\PSqt \Rightarrow \widetilde{\tau}$
- chargino/neutralino\\PSqx \Rightarrow \tilde{\chi}
- $\begin{array}{c} \bullet \ \ chargino \ mp \\ {} \backslash {\it PSgxmp} \ \Rightarrow \ \widetilde{\chi}^{\mp} \end{array}$
- $\begin{array}{c} \bullet \ \ neutralino \\ \ \ \backslash \textit{PSgxz} \ \Rightarrow \ \widetilde{\chi}^0 \end{array}$
- next-to-lightest neutralino $\c PSgxzii \Rightarrow \widetilde{\chi}_2^0$
- gluino\PSq  $\Rightarrow \widetilde{g}$
- slepton (generic) $\c PSl \Rightarrow \tilde{\ell}$
- anti-slepton (generic) $|PaSl| \Rightarrow \tilde{\ell}$
- squark (generic) $\parbox{$\backslash$PSq$} \Rightarrow \widetilde{q}$
- $down \ squark$ \\PSqd \Rightarrow  $\widetilde{d}$
- $up \ squark$ \\PSqu \Rightarrow \widetilde{u}

- strange squark
  - $\PSqs \Rightarrow \widetilde{s}$
- $charm \ squark$ \\PSqc \Rightarrow \circ{c}{c}
- bottom squark (sbottom)  $\begin{psmallmatrix} \mathsf{PSqb} \Rightarrow \widetilde{b} \end{psmallmatrix}$
- $top \ squark \ (stop)$ \\PSqt \Rightarrow \tilde{t}

- ullet anti-up squark ackslash extstyle extstyle

## 5 Sans font

- \PB ⇒ B
- $\PBpm \Rightarrow B^{\pm}$
- $\PBmp \Rightarrow B^{\mp}$
- $\PBp \Rightarrow B^+$
- $\PBm \Rightarrow B^-$
- $\PBz \Rightarrow B^0$
- $\backslash PBst \Rightarrow B^*$
- $\PdB \Rightarrow B_d^0$
- $\backslash PuB \Rightarrow B^+$
- $\PcB \Rightarrow B_c^+$
- $\PsB \Rightarrow B_s^0$
- $\PaB \Rightarrow \overline{B}$

- $\PaBz \Rightarrow \overline{B}^0$
- $\backslash PadB \Rightarrow \overline{B}_d^0$
- $\PauB \Rightarrow B^-$
- $\backslash PacB \Rightarrow B_c^-$
- $\backslash PasB \Rightarrow \overline{B}_s^0$
- kaon
  - $\texttt{\begin{tabular}{l} \begin{tabular}{l} \begin{ta$

- K-long  $\begin{tabular}{l} \begin{tabular}{l} \b$
- K-short  $\begin{tabular}{l} \begin{tabular}{l} \$
- K star  $\$  \PKst  $\Rightarrow$  K\*
- neutral anti-kaon  $\ \ \, \ \, \backslash \text{PaKz} \, \Rightarrow \, \overline{K}^0$
- \PKeiii  $\Rightarrow K_{e3}$
- \PKgmiii  $\Rightarrow K_{\mu 3}$
- \PKzeiii  $\Rightarrow K_{e3}^0$
- \PKzgmiii  $\Rightarrow K_{\mu 3}^0$
- $\PKia \Rightarrow K_1(1400)$
- \PKii  $\Rightarrow$   $K_2(1770)$
- \PKi  $\Rightarrow$  K<sub>1</sub>(1270)
- \PKsti ⇒ K\*(892)
- \PKsta  $\Rightarrow$  K\*(1370)
- \PKstb  $\Rightarrow$  K\*(1680)
- \PKstiii  $\Rightarrow$  K<sub>3</sub>(1780)

- \PKstii  $\Rightarrow K_2^*(1430)$
- \PKstiv  $\Rightarrow$   $K_4^*(2045)$
- \PKstz  $\Rightarrow$   $K_0^*(1430)$
- $\PN \Rightarrow N$
- $\PNa \Rightarrow N(1440) P_{11}$
- \PNb  $\Rightarrow$  N(1520) D<sub>13</sub>
- $\PNc \Rightarrow N(1535) S_{11}$
- $\PNd \Rightarrow N(1650) S_{11}$
- \PNe  $\Rightarrow$  N(1675) D<sub>15</sub>
- \PNf  $\Rightarrow$  N(1680)  $F_{15}$
- $\backslash PNg \Rightarrow N(1700) D_{13}$
- $\PNh \Rightarrow N(1710) P_{11}$
- $\PNi \Rightarrow N(1720) P_{13}$
- $\PNj \Rightarrow N(2190) G_{17}$
- $\PNk \Rightarrow N(2220) H_{19}$
- \PN1  $\Rightarrow$  N(2250) G<sub>19</sub>
- $\PNm \Rightarrow N(2600) I_{1,11}$

- W boson  $\backslash PW \Rightarrow W$

- charged W boson  $\parbox{PWpm} \Rightarrow \parbox{W}^{\pm}$
- charged W boson  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabul$

- $\backslash PWR \Rightarrow W_R$
- W-prime boson  $\backslash PWpr \Rightarrow W'$
- Z boson\PZ ⇒ Z
- Z-prime boson  $\PZpr \Rightarrow Z'$
- left-right Z boson  $\PZLR \Rightarrow Z_{LR}$
- $\PZgc \Rightarrow Z_{\chi}$
- $\PZge \Rightarrow Z_{\eta}$
- $\PZgy \Rightarrow Z_{\psi}$
- $\PZi \Rightarrow Z_1$
- axion  $\ \ \, \backslash PAz \Rightarrow A^0$

- light Higgs\Ph ⇒ h
- pseudoscalar Higgs
   \PA ⇒ A

- negative-charged Higgs
   \PHm ⇒ H<sup>-</sup>

- generic neutrino  $\protect\operatorname{\mathsf{NPgn}} \Rightarrow \nu$
- neutrino (for lepton ell)  $\mathsf{Pgnl} \Rightarrow \nu_\ell$
- anti-neutrino (for lepton ell) \Pagn1  $\Rightarrow \bar{\nu_{\ell}}$
- electronic\Pe ⇒ e

- electron  $\ensuremath{\backslash \text{Pem}} \Rightarrow e^-$
- positron  $\ensuremath{\backslash \text{Pep}} \Rightarrow \ensuremath{\text{e}^{+}}$
- muonic  $\protect\operatorname{\begin{tabular}{c} \protect\operatorname{\begin{tabular}{c} \protect\begin{tabular}{c} \protect\b$
- mu minus/plus  $\protect\operatorname{\mathsf{NPgmmp}} \Rightarrow \mu^{\mp}$
- anti-muon  $\protect\operatorname{\mathsf{Pgmp}} \Rightarrow \mu^+$
- tauonic  $\label{eq:Pgt} \ \ \, \mathbf{Pgt} \Rightarrow \tau$

- tau lepton  $\label{eq:pgtm} $$ \P^-$$
- electron neutrino  $\ensuremath{\backslash \mathrm{Pgne}} \Rightarrow \nu_{\mathrm{e}}$
- muon neutrino  $\mathsf{\backslash Pgngm} \Rightarrow \nu_{\mu}$

- tau neutrino
  - $\P$  \Pgngt  $\Rightarrow \nu_{\tau}$
- electron anti-neutrino
  - \Pagne  $\Rightarrow \overline{\nu}_{e}$
- muon anti-neutrino
  - $\backslash \mathtt{Pagngm} \Rightarrow \overline{\nu}_{\mu}$
- tau anti-neutrino
  - $\backslash Pagngt \Rightarrow \overline{\nu}_{\tau}$
- quark
  - $\P \Rightarrow q$
- anti-quark
  - $\Paq \Rightarrow \bar{q}$
- down quark
  - $\Pd \Rightarrow d$
- up quark
  - $\P u \Rightarrow u$
- strange quark
  - $\P \Rightarrow s$
- charm quark
  - $\protect\operatorname{Pqc} \Rightarrow c$
- bottom quark
  - $\P b \Rightarrow b$
- top quark
  - $\P \Rightarrow t$
- down anti-quark
- up anti-quark
  - $\Paqu \Rightarrow \overline{u}$

- strange anti-quark
  - $\P \Rightarrow \bar{s}$
- charm anti-quark
  - $\Paqc \Rightarrow \overline{c}$
- bottom anti-quark
- top anti-quark
  - $\P \Rightarrow \bar{t}$
- $\Pqb \Rightarrow b$
- $\Pqc \Rightarrow c$
- $\Pqd \Rightarrow d$
- $\P \Rightarrow s$
- $\P \Rightarrow t$
- $\P u \Rightarrow u$
- $\backslash Pq \Rightarrow q$
- anti-bottom quark
  - $\P \Rightarrow \overline{b}$
- anti-charm quark
- anti-down quark
- anti-strange quark
  - $\P \Rightarrow \bar{s}$
- anti-top quark
  - $\texttt{\paqt} \Rightarrow \overline{t}$
- anti-up quark
  - $\Paqu \Rightarrow \overline{u}$

- ullet anti-quark  $\protect\operatorname{\begin{tabular}{ll} ar{P}aq \Rightarrow ar{q} \end{tabular}}$
- proton  $\begin{tabular}{l} \bullet & p \\ \begin{tabular}{l} Pp \Rightarrow p \\ \end{tabular}$
- neutron\Pn ⇒ n

- $\bullet \ \backslash \mathsf{Pcgc} \Rightarrow \chi_\mathsf{c}$
- $\ensuremath{\,^{\text{Pcgcii}}} \Rightarrow \chi_{\text{c2}}(1\ensuremath{\,^{\text{P}}})$
- $\ensuremath{\mathsf{Vegci}} \Rightarrow \chi_{\mathrm{c1}}(1\ensuremath{\mathsf{P}})$
- $\backslash Pcgcz \Rightarrow \chi_{c0}(1P)$
- \Pfia  $\Rightarrow$  f<sub>1</sub>(1390)
- \Pfib  $\Rightarrow$  f<sub>1</sub>(1510)
- \Pfiia  $\Rightarrow f_2(1720)$
- \Pfiib  $\Rightarrow$  f<sub>2</sub>(2010)
- \Pfiic  $\Rightarrow$  f<sub>2</sub>(2300)
- $\backslash Pfiid \Rightarrow f_2(2340)$
- \Pfiipr  $\Rightarrow$   $f_2'(1525)$
- \Pfii  $\Rightarrow$  f<sub>2</sub>(1270)
- \Pfiv  $\Rightarrow$  f<sub>4</sub>(2050)
- \Pfi  $\Rightarrow$   $f_1(1285)$

- \Pfza  $\Rightarrow$  f<sub>0</sub>(1400)
- \Pfzb  $\Rightarrow$  f<sub>0</sub>(1590)
- $\backslash Pfz \Rightarrow f_0(975)$
- $\PgD \Rightarrow \Delta$
- $\PgDa \Rightarrow \Delta(1232) P_{33}$
- $\PgDb \Rightarrow \Delta(1620) S_{31}$
- $\backslash PgDc \Rightarrow \Delta(1700) D_{33}$
- $\prescript{PgDd} \Rightarrow \Delta(1900) \prescript{S}_{31}$
- \PgDe  $\Rightarrow \Delta(1905) F_{35}$
- $\backslash PgDf \Rightarrow \Delta(1910) P_{31}$
- $\PgDh \Rightarrow \Delta(1920) P_{33}$
- $\PgDi \Rightarrow \Delta(1930) D_{35}$
- $\protect\operatorname{PgDj} \Rightarrow \Delta(1950) \protect\operatorname{F}_{37}$
- $\PgDk \Rightarrow \Delta(2420) H_{3,11}$
- $\PgL \Rightarrow \Lambda$
- $\backslash PagL \Rightarrow \overline{\Lambda}$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- \PbgL  $\Rightarrow \Lambda_b$
- \PgLa  $\Rightarrow \Lambda(1405) S_{01}$
- \PgLb  $\Rightarrow \Lambda(1520) D_{03}$
- $\PgLc \Rightarrow \Lambda(1600) P_{01}$
- \PgLd  $\Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- \PgLf  $\Rightarrow \Lambda(1800) S_{01}$

- $\backslash PgLg \Rightarrow \Lambda(1810) P_{01}$
- \PgLh  $\Rightarrow \Lambda(1820) F_{05}$
- \PgLi  $\Rightarrow \Lambda(1830) D_{05}$
- $\PgLj \Rightarrow \Lambda(1890) P_{03}$
- $\PgLk \Rightarrow \Lambda(2100) G_{07}$
- \PgL1  $\Rightarrow \Lambda(2110) F_{05}$
- \PgLm  $\Rightarrow \Lambda(2350) H_{09}$
- $\backslash Pg0 \Rightarrow \Omega$
- $\backslash PgOpm \Rightarrow \Omega^{\pm}$
- $\backslash PgOmp \Rightarrow \Omega^{\mp}$
- $\PgOp \Rightarrow \Omega^+$
- $\backslash PgOm \Rightarrow \Omega^-$
- $\backslash PgOma \Rightarrow \Omega(2250)^-$
- new

$$\verb|\PagO| \Rightarrow \overline{\Omega}$$

- $\PagOp \Rightarrow \overline{\Omega}^+$
- $\backslash PagOm \Rightarrow \overline{\Omega}^-$
- $\backslash PgS \Rightarrow \Sigma$
- \PgSpm  $\Rightarrow \Sigma^{\pm}$
- $\PgSmp \Rightarrow \Sigma^{\mp}$
- $\PSm \Rightarrow \Sigma^-$
- \PgSp  $\Rightarrow \Sigma^+$
- $\protect\operatorname{PgSz} \Rightarrow \Sigma^0$

- $\bullet \ \backslash \texttt{PcgS} \Rightarrow \Sigma_c$
- $\backslash PagSm \Rightarrow \overline{\Sigma}^-$
- $\PagSp \Rightarrow \overline{\Sigma}^+$
- $\backslash PagSz \Rightarrow \overline{\Sigma}^0$
- $\PacgS \Rightarrow \overline{\Sigma}_c$
- $\PSa \Rightarrow \Sigma(1385) P_{13}$
- $\PgSb \Rightarrow \Sigma(1660) P_{11}$
- $\backslash PgSc \Rightarrow \Sigma(1670) D_{13}$
- $\prescript{PgSd} \Rightarrow \Sigma(1750) S_{11}$
- \PgSe  $\Rightarrow \Sigma(1775) D_{15}$
- \PgSf  $\Rightarrow \Sigma(1915) F_{15}$
- $\P Sh \Rightarrow \Sigma(2030) F_{17}$
- \PgSi  $\Rightarrow \Sigma(2050)$
- $\ensuremath{\mathsf{PcgSi}} \Rightarrow \Sigma_{c}(2455)$
- $\PgU \Rightarrow \Upsilon$
- $\P$   $\P$   $\Rightarrow \Upsilon (1S)$
- \PgUa  $\Rightarrow \Upsilon(2S)$
- $\P Ub \Rightarrow \Upsilon(3S)$
- \PgUc  $\Rightarrow \Upsilon(4S)$
- \PgUd  $\Rightarrow \Upsilon(10860)$
- \PgUe  $\Rightarrow \Upsilon(11020)$
- $\PgX \Rightarrow \Xi$
- $\PXp \Rightarrow \Xi^+$

- $\PXm \Rightarrow \Xi^-$
- $\protect\operatorname{PgXz} \Rightarrow \Xi^0$
- $\PgXa \Rightarrow \Xi(1530) P_{13}$
- $\backslash PgXb \Rightarrow \Xi(1690)$
- $\PgXc \Rightarrow \Xi(1820) D_{13}$
- $\backslash PgXd \Rightarrow \Xi(1950)$
- \PgXe  $\Rightarrow \Xi(2030)$
- $\PagXp \Rightarrow \overline{\Xi}^+$
- $\PagXm \Rightarrow \overline{\Xi}^-$
- $\PagXz \Rightarrow \overline{\Xi}^0$
- $\PcgXp \Rightarrow \Xi_c^+$
- $\PcgXz \Rightarrow \Xi_c^0$
- \Pgf  $\Rightarrow \phi$
- $\bullet \ \ \mathbf{\backslash Pgfi} \Rightarrow \phi(1020)$
- \Pgfa  $\Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- $\backslash Pgh \Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- $\backslash Pcgh \Rightarrow \eta_c$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- $\Pcghi \Rightarrow \eta_c(1S)$

- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- \Pgoa  $\Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $Pgp \Rightarrow \pi$
- charged pion  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular$
- negative pion  $\begin{tabular}{l} \label{eq:pgpm} \end{tabular} \begin{tabular}{l} \parbox{0.5cm} \parbox{0$

- \Pgpa  $\Rightarrow \pi(1300)$
- \Pgpii  $\Rightarrow \pi_2(1670)$
- resonance removed  $\mathsf{Pgr} \Rightarrow \rho$
- $\backslash Pgrp \Rightarrow \rho^+$
- $\backslash Pgrm \Rightarrow \rho^-$
- $\backslash Pgrpm \Rightarrow \rho^{\pm}$
- $\bullet \ \mathsf{\backslash Pgrmp} \Rightarrow \rho^{\mp}$
- $\backslash Pgrz \Rightarrow \rho^0$

- new
  - \Pgri  $\Rightarrow \rho(770)$
- \Pgra  $\Rightarrow \rho(1450)$
- \Pgrb  $\Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$
- \PJgy  $\Rightarrow$  J/ $\psi$
- \PJgyi  $\Rightarrow$  J/ $\psi$ (1S)
- $\backslash Pgy \Rightarrow \psi$
- \Pgyii  $\Rightarrow \psi(2S)$
- \Pgya  $\Rightarrow \psi(3770)$
- \Pgyb  $\Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- \Pgyd  $\Rightarrow \psi(4415)$
- $\backslash PD \Rightarrow D$
- $\PDpm \Rightarrow D^{\pm}$
- $\backslash PDmp \Rightarrow D^{\mp}$
- $\PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\PDp \Rightarrow D^+$
- \PDst  $\Rightarrow$  D\*
- $\PaD \Rightarrow \overline{D}$
- $\PaDz \Rightarrow \overline{D}^0$

- new 2005-07-08
  - $\P D \Rightarrow D_s$
- $\PsDm \Rightarrow D_s^-$
- $\PsDp \Rightarrow D_s^+$
- $\PsDpm \Rightarrow D_s^{\pm}$
- $\PsDmp \Rightarrow D_s^{\mp}$
- \PsDst  $\Rightarrow$  D<sub>s</sub>\*
- $\backslash PsDipm \Rightarrow D_{s1}(2536)^{\pm}$
- $\backslash PsDimp \Rightarrow D_{s1}(2536)^{\mp}$
- \PDiz  $\Rightarrow$  D<sub>1</sub>(2420)<sup>0</sup>
- \PDstiiz  $\Rightarrow$  D<sub>2</sub>\*(2460)<sup>0</sup>
- $\backslash PDstpm \Rightarrow D^*(2010)^{\pm}$
- $\ensuremath{\backslash} \mathtt{PDstmp} \Rightarrow \mathsf{D}^*(2010)^{\mp}$
- \PDstz  $\Rightarrow$  D\*(2010)<sup>0</sup>
- $\backslash PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\PLmp \Rightarrow L^{\mp}$
- $\PLz \Rightarrow L^0$
- \Paii  $\Rightarrow$  a<sub>2</sub>(1320)
- $\Pai \Rightarrow a_1(1260)$
- $\Paz \Rightarrow a_0(980)$
- $\bullet \ \ \mathsf{\backslash Pbgcia} \Rightarrow \chi_{\mathrm{b1}}(\mathrm{2P})$
- \Pbgciia  $\Rightarrow \chi_{\rm b2}({\rm 2P})$

- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- $\backslash Pbgcza \Rightarrow \chi_{b0}(2P)$
- \Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- \Pbi  $\Rightarrow$  b<sub>1</sub>(1235)
- \Phia  $\Rightarrow$  h<sub>1</sub>(1170)
- Higgsino  $\begin{tabular}{l} \label{eq:PSH} \begin{tabular}{l} \beg$
- positive Higgsino  $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$

- neutral Higgsino  $\label{eq:PSHz} \ \ \ \stackrel{}{\rightarrow} \ \ \widetilde{H}^0$
- wino  $\begin{tabular}{l} \bullet & \text{wino} \\ \begin{tabular}{l} \bullet & \widetilde{W} \\ \end{tabular}$
- positive wino  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabula$
- negative wino  $\PSWm \Rightarrow \widetilde{W}^-$
- $\begin{tabular}{ll} \bullet & \mbox{wino pm} \\ \mbox{$\backslash PSWpm$} \Rightarrow \widetilde{W}^{\pm} \\ \end{tabular}$

- $\begin{tabular}{ll} \bullet & wino & mp \\ & \begin{tabular}{ll} \begi$
- zino  $\begin{tabular}{l} \begin{tabular}{l} \be$
- bino  $\ \ \, \backslash \underline{\mathsf{PSB}} \Rightarrow \widetilde{\mathsf{B}}$
- photino  $\label{eq:PSgg} \ \, \mathbf{PSgg} \, \Rightarrow \, \widetilde{\gamma}$
- smuon  $\label{eq:psgm} \ \, \mathbf{PSgm} \, \Rightarrow \, \widetilde{\boldsymbol{\mu}}$
- stau  $\text{ $\backslash \operatorname{PSgt} \Rightarrow \widetilde{\tau}$ }$

- $\begin{tabular}{ll} \bullet & {\it chargino mp} \\ & \begin{tabular}{ll} {\it PSgxmp} \Rightarrow \widetilde{\chi}^{\mp} \\ \end{tabular}$
- neutralino  $\label{eq:psgxz} \ \, \mathbf{\hat{\chi}^0}$

• next-to-lightest neutralino

$$\verb|\PSgxzii| \Rightarrow \widetilde{\chi}_2^0$$

gluino

$$\backslash \mathtt{PSg} \Rightarrow \widetilde{\mathtt{g}}$$

• slepton (generic)

\PS1 
$$\Rightarrow \widetilde{\ell}$$

• anti-slepton (generic)

$$\Pasl \Rightarrow \tilde{\widetilde{\ell}}$$

• squark (generic)

$$\PSq \Rightarrow \widetilde{q}$$

• anti-squark (generic)

$$\PaSq \Rightarrow ar{\widetilde{q}}$$

• down squark

$$\backslash \mathtt{PSqd} \Rightarrow \widetilde{\mathsf{d}}$$

• up squark

$$\backslash PSqu \Rightarrow \widetilde{u}$$

• strange squark

$$\texttt{\parbox{$\backslash$PSqs$}} \Rightarrow \widetilde{\mathsf{s}}$$

• charm squark

• bottom squark (sbottom)

$$\backslash \mathtt{PSqb} \Rightarrow \widetilde{\mathsf{b}}$$

• top squark (stop)

$$\texttt{\part} \Rightarrow \widetilde{t}$$

• anti-down squark

$$\PaSqd \Rightarrow \widetilde{d}$$

• anti-up squark

$$\PaSqu \Rightarrow \overline{\widetilde{u}}$$

• anti-strange squark

$$\PaSqs \Rightarrow \overline{\widetilde{s}}$$

• anti-charm squark

$$\PaSqc \Rightarrow \overline{\widetilde{c}}$$

• anti-bottom squark

$$\PaSqb \Rightarrow \overline{\widetilde{b}}$$

anti-top squark (stop)

$$\PaSqt \Rightarrow \overline{\widetilde{t}}$$

## 6 Bold sans font

- \PB ⇒ **B**
- \PBpm  $\Rightarrow$   $\mathbf{B}^{\pm}$
- \PBmp  $\Rightarrow B^{\mp}$
- $\PBp \Rightarrow B^+$
- $\PBm \Rightarrow B^-$
- $\backslash PBz \Rightarrow B^0$
- $\PBst \Rightarrow B^*$
- $\backslash PdB \Rightarrow B_d^0$
- \PuB  $\Rightarrow$  B<sup>+</sup>
- $\PcB \Rightarrow B_c^+$
- \PsB  $\Rightarrow$   $B_s^0$
- $\PaB \Rightarrow \overline{B}$
- $\bullet \ \backslash \texttt{PaBz} \Rightarrow \overline{B}{}^0$
- $\PadB \Rightarrow \overline{B}_d^0$
- $\PauB \Rightarrow B^-$
- $\PacB \Rightarrow B_c^-$
- $\PasB \Rightarrow \overline{B}_s^0$
- kaon
   \PK ⇒ K

- charged kaon
   \PKmp ⇒ K<sup>∓</sup>
- negative kaon\PKm ⇒ K⁻
- positive kaon
   \PKp ⇒ K<sup>+</sup>
- neutral kaon  $\$  \PKz  $\Rightarrow$   $\mathbf{K}^0$
- K-long  $\begin{tabular}{l} \begin{tabular}{l} \b$
- K star  $\$  \PKst  $\Rightarrow$  K\*
- neutral anti-kaon  $\label{eq:PaKz} \ \ \ \ \overline{\mathbf{K}}^0$
- \PKeiii  $\Rightarrow$   $K_{e3}$
- \PKgmiii  $\Rightarrow$   $K_{\mu 3}$
- \PKzeiii  $\Rightarrow \mathsf{K}_{\mathrm{e}3}^0$
- \PKzgmiii  $\Rightarrow \mathsf{K}_{\mu 3}^0$
- \PKia  $\Rightarrow$   $K_1(1400)$
- $\PKii \Rightarrow K_2(1770)$

- \PKi  $\Rightarrow$  K<sub>1</sub>(1270)
- \PKsti ⇒ K\*(892)
- $\backslash PKsta \Rightarrow K^*(1370)$
- \PKstb  $\Rightarrow$  K\*(1680)
- \PKstiii  $\Rightarrow$   $K_3^*(1780)$
- \PKstii  $\Rightarrow$   $K_2^*(1430)$
- \PKstiv  $\Rightarrow K_4^*(2045)$
- \PKstz  $\Rightarrow K_0^*(1430)$
- $\PN \Rightarrow N$
- $\PNa \Rightarrow N(1440) P_{11}$
- $\PNb \Rightarrow N(1520) D_{13}$
- \PNc  $\Rightarrow$  N(1535) S<sub>11</sub>
- \PNe  $\Rightarrow$  N(1675) D<sub>15</sub>
- $\PNf \Rightarrow N(1680) F_{15}$
- \PNg  $\Rightarrow$  N(1700) D<sub>13</sub>
- $\PNh \Rightarrow N(1710) P_{11}$
- \PNi  $\Rightarrow$  N(1720)  $P_{13}$
- \PNj  $\Rightarrow$  N(2190)  $G_{17}$
- $\PNk \Rightarrow N(2220) H_{19}$
- \PN1  $\Rightarrow$  N(2250)  $G_{19}$
- $\bullet \ \ \backslash \mathtt{PNm} \Rightarrow \mathsf{N}(2600) \ \mathsf{I}_{1,11}$

• gluon

$$\Pg \Rightarrow g$$

photon

$$\backslash Pgg \Rightarrow \gamma$$

photon\*

$$\texttt{\paggx} \Rightarrow \gamma^*$$

W boson

$$\PW \Rightarrow W$$

charged W boson

$$\PWpm \Rightarrow W^{\pm}$$

charged W boson

$$\PWmp \Rightarrow \mathbf{W}^{\mp}$$

• W-plus

$$\PWp \Rightarrow W^+$$

• W-minus

$$\PWm \Rightarrow W^-$$

• \PWR 
$$\Rightarrow$$
  $W_R$ 

• W-prime boson

$$\PWpr \Rightarrow W'$$

Z boson

$$\PZ \Rightarrow \mathbf{Z}$$

neutral Z boson

$$\PZz \Rightarrow Z^0$$

• Z-prime boson

$$\PZpr \Rightarrow Z'$$

• left-right Z boson

$$\PZLR \Rightarrow \mathbf{Z}_{LR}$$

- \PZgc  $\Rightarrow$   $\mathbf{Z}_{\chi}$
- \PZge  $\Rightarrow$   $\mathbf{Z}_{\eta}$
- \PZgy  $\Rightarrow$   $\mathbf{Z}_{\psi}$
- $\PZi \Rightarrow Z_1$
- axion  $\ \ \, \backslash \mathtt{PAz} \, \Rightarrow \, \mathbf{A}^0$
- standard/heavy Higgs
   ∖PH ⇒ H
- explicitly neutral standard/heavy Higgs  $\label{eq:PHz} \ \ \, \! \! \backslash \mathtt{PHz} \ \, \Rightarrow \ \, \! H^0$
- light Higgs\Ph ⇒ h
- explicitly neutral light Higgs
   \Phz ⇒ h<sup>0</sup>
- pseudoscalar Higgs
   \PA ⇒ A
- explicitly neutral pseudoscalar Higgs
   ∖PAz ⇒ A<sup>0</sup>
- charged Higgs
   \PHpm ⇒ H<sup>±</sup>
- positive-charged Higgs

   \PHp ⇒ H<sup>+</sup>
- negative-charged Higgs
   \PHm ⇒ H<sup>-</sup>

- fermion\Pf ⇒ f

- positive fermion  $\begin{tabular}{l} \label{eq:pfp} \end{tabular} \begin{tabular}{l} \end{tabula$
- negative fermion
   \Pfm ⇒ f<sup>-</sup>

- generic neutrino  $\protect\operatorname{\begin{tabular}{l} \protect\operatorname{\begin{tabular}{l} \protect\begin{tabular}{l} \protect\operatorname{\begin{tabular}{l} \protect\begin{tabular}{l} \protect\begin{tabular}{l}$
- neutrino (for lepton ell)  $\ \ \, \backslash \texttt{Pgnl} \, \Rightarrow \, \nu_{\ell}$

• generic anti-neutrino

$$\Pagn \Rightarrow \bar{\nu}$$

• anti-neutrino (for lepton ell)

$$\P$$

• electronic

$$\ensuremath{\mbox{\sc Pe}} \Rightarrow \mathbf{e}$$

• e plus/minus

$$\P \Rightarrow e^{\pm}$$

• e minus/plus

$$\ensuremath{\mbox{\sf Pemp}} \Rightarrow \mathbf{e}^{\mp}$$

• electron

$$\ensuremath{\mbox{\sc Pem}} \Rightarrow \mathbf{e}^-$$

• positron

$$\ensuremath{\mbox{\sc Pep}} \Rightarrow {
m e}^+$$

• muonic

$$\backslash Pgm \Rightarrow \mu$$

• mu plus/minus

$$\backslash Pgmpm \Rightarrow \mu^{\pm}$$

• mu minus/plus

$$\backslash Pgmmp \Rightarrow \mu^{\mp}$$

• muon

$$\backslash Pgmm \Rightarrow \mu^-$$

• anti-muon

$$\backslash Pgmp \Rightarrow \mu^+$$

• tauonic

\Pgt 
$$\Rightarrow au$$

• tau plus/minus

\Pgtpm 
$$\Rightarrow au^{\pm}$$

• tau minus/plus

$$\texttt{Pgtmp} \Rightarrow \tau^{\mp}$$

• tau lepton

\Pgtm 
$$\Rightarrow au^-$$

• anti-tau

\Pgtp 
$$\Rightarrow au^+$$

• electron neutrino

\Pgne 
$$\Rightarrow \nu_{\rm e}$$

• muon neutrino

$$\backslash Pgngm \Rightarrow \nu_{\mu}$$

• tau neutrino

\Pgngt 
$$\Rightarrow \nu_{\tau}$$

• electron anti-neutrino

\Pagne 
$$\Rightarrow \overline{\nu}_{\rm e}$$

• muon anti-neutrino

$$\backslash Pagngm \Rightarrow \overline{\nu}_{\mu}$$

• tau anti-neutrino

$$\backslash Pagngt \Rightarrow \overline{\nu}_{\tau}$$

quark

$$\P \Rightarrow \mathbf{q}$$

anti-quark

$$\P \Rightarrow \bar{q}$$

down quark

$$\Pqd \Rightarrow d$$

• up quark

$$\Pqu \Rightarrow u$$

• strange quark

$$\P \Rightarrow s$$

• charm quark

$$\protect\ Pqc \Rightarrow c$$

• bottom quark

$$\P \Rightarrow \mathbf{b}$$

• top quark

$$\P \Rightarrow t$$

• down anti-quark

• up anti-quark

$$\Paqu \Rightarrow \overline{\mathbf{u}}$$

• strange anti-quark

$$\P \Rightarrow \bar{s}$$

• charm anti-quark

• bottom anti-quark

• top anti-quark

$$\P \Rightarrow \bar{\mathbf{t}}$$

- $\Pqb \Rightarrow b$
- $\Pqc \Rightarrow c$
- $\Pqd \Rightarrow d$
- $\P \Rightarrow s$
- $\P \Rightarrow t$
- $\Pqu \Rightarrow u$
- $\backslash Pq \Rightarrow q$

anti-bottom quark

• anti-charm quark

• anti-down quark

$$\Paqd \Rightarrow \overline{d}$$

• anti-strange quark

$$\P \Rightarrow \bar{s}$$

anti-top quark

$$\P \Rightarrow \bar{t}$$

• anti-up quark

$$\Paqu \Rightarrow \overline{\mathbf{u}}$$

anti-quark

$$\P \Rightarrow \bar{q}$$

• proton

$$\Pp \Rightarrow p$$

neutron

$$\Pn \Rightarrow n$$

• anti-proton

• anti-neutron

- \Pcgc  $\Rightarrow \chi_c$
- \Pcgcii  $\Rightarrow \chi_{c2}(1P)$
- \Pcgci  $\Rightarrow \chi_{c1}(1P)$
- \Pcgcz  $\Rightarrow \chi_{c0}(1P)$

- \Pfia  $\Rightarrow$  f<sub>1</sub>(1390)
- \Pfib  $\Rightarrow$  f<sub>1</sub>(1510)
- \Pfiia  $\Rightarrow$  f<sub>2</sub>(1720)
- \Pfiib  $\Rightarrow$  f<sub>2</sub>(2010)
- \Pfiic  $\Rightarrow$  f<sub>2</sub>(2300)
- \Pfiid  $\Rightarrow$  f<sub>2</sub>(2340)
- \Pfiipr  $\Rightarrow$   $f_2'(1525)$
- \Pfii  $\Rightarrow$  f<sub>2</sub>(1270)
- \Pfiv  $\Rightarrow$   $f_4(2050)$
- $\Pi \Rightarrow f_1(1285)$
- $\P$   $\Rightarrow$   $f_0(1400)$
- \Pfzb  $\Rightarrow$   $f_0(1590)$
- $\Pfz \Rightarrow f_0(975)$
- \PgD  $\Rightarrow$   $\Delta$
- $\PgDa \Rightarrow \Delta(1232) P_{33}$
- $\PgDb \Rightarrow \Delta(1620) S_{31}$
- $\backslash PgDc \Rightarrow \Delta(1700) D_{33}$
- $\protect\operatorname{PgDd} \Rightarrow \Delta(1900) \protect\operatorname{S}_{31}$
- \PgDe  $\Rightarrow$   $\Delta(1905)$   $F_{35}$
- $\protect\operatorname{PgDf} \Rightarrow \Delta(1910) \protect\operatorname{P}_{31}$
- $\PgDh \Rightarrow \Delta(1920) P_{33}$
- \PgDi  $\Rightarrow$   $\Delta(1930)$  D<sub>35</sub>
- \PgDj  $\Rightarrow$   $\Delta(1950)$   $F_{37}$

- $\backslash PgDk \Rightarrow \Delta(2420) H_{3,11}$
- \PgL ⇒ Λ
- $\backslash PagL \Rightarrow \overline{\Lambda}$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- $\backslash PbgL \Rightarrow \Lambda_b$
- \PgLa  $\Rightarrow \Lambda(1405) S_{01}$
- $\PgLb \Rightarrow \Lambda(1520) D_{03}$
- \PgLc  $\Rightarrow \Lambda(1600) P_{01}$
- $\PgLd \Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- \PgLf  $\Rightarrow \Lambda(1800) S_{01}$
- $\PgLg \Rightarrow \Lambda(1810) P_{01}$
- \PgLh  $\Rightarrow$   $\Lambda(1820)$   $F_{05}$
- \PgLi  $\Rightarrow$   $\Lambda(1830)$   $D_{05}$
- $\PLj \Rightarrow \Lambda(1890) P_{03}$
- $\protect\operatorname{PgLk} \Rightarrow \Lambda(2100) \protect\operatorname{G}_{07}$
- \PgL1  $\Rightarrow$   $\Lambda(2110)$   $F_{05}$
- $\PLm \Rightarrow \Lambda(2350) H_{09}$
- \PgO  $\Rightarrow \Omega$
- \PgOpm  $\Rightarrow \Omega^{\pm}$
- ullet \PgOmp  $\Rightarrow \Omega^{\mp}$
- \PgOp  $\Rightarrow \Omega^+$
- ullet \PgOm  $\Rightarrow \Omega^-$
- \PgOma  $\Rightarrow \Omega(2250)^-$

new

$$\setminus \texttt{PagO} \Rightarrow \overline{\Omega}$$

• \PagOp  $\Rightarrow \overline{\Omega}^+$ 

• \PagOm  $\Rightarrow \overline{\Omega}^-$ 

•  $\PS \Rightarrow \Sigma$ 

• \PgSpm  $\Rightarrow \Sigma^{\pm}$ 

•  $\PSmp \Rightarrow \Sigma^{\mp}$ 

•  $\backslash PgSm \Rightarrow \Sigma^-$ 

• \PgSp  $\Rightarrow \Sigma^+$ 

•  $\backslash PgSz \Rightarrow \Sigma^0$ 

•  $\backslash PcgS \Rightarrow \Sigma_c$ 

•  $\PagSm \Rightarrow \overline{\Sigma}^-$ 

•  $\backslash PagSp \Rightarrow \overline{\Sigma}^+$ 

•  $\PagSz \Rightarrow \overline{\Sigma}^0$ 

•  $\backslash PacgS \Rightarrow \overline{\Sigma}_c$ 

•  $\PgSa \Rightarrow \Sigma(1385) P_{13}$ 

•  $\backslash PgSb \Rightarrow \Sigma(1660) P_{11}$ 

• \PgSc  $\Rightarrow \Sigma(1670) D_{13}$ 

•  $\backslash PgSd \Rightarrow \Sigma(1750) S_{11}$ 

• \PgSe  $\Rightarrow \Sigma(1775) D_{15}$ 

• \PgSf  $\Rightarrow \Sigma(1915) F_{15}$ 

•  $\backslash PgSg \Rightarrow \Sigma(1940) D_{13}$ 

•  $\backslash PgSh \Rightarrow \Sigma(2030) F_{17}$ 

• \PgSi  $\Rightarrow \Sigma(2050)$ 

•  $\backslash PcgSi \Rightarrow \Sigma_c(2455)$ 

• \PgU  $\Rightarrow \Upsilon$ 

• \PgUi  $\Rightarrow \Upsilon(1S)$ 

• \PgUa  $\Rightarrow \Upsilon(2S)$ 

• \PgUb  $\Rightarrow \Upsilon(3S)$ 

• \PgUc  $\Rightarrow \Upsilon(4S)$ 

• \PgUd  $\Rightarrow \Upsilon(10860)$ 

• \PgUe  $\Rightarrow \Upsilon(11020)$ 

• \PgX ⇒ **Ξ** 

•  $\PgXp \Rightarrow \Xi^+$ 

•  $\PgXm \Rightarrow \Xi^-$ 

•  $\PgXz \Rightarrow \Xi^0$ 

•  $\backslash PgXa \Rightarrow \Xi(1530) P_{13}$ 

•  $\backslash PgXb \Rightarrow \Xi(1690)$ 

•  $\backslash PgXc \Rightarrow \Xi(1820) D_{13}$ 

•  $\backslash PgXd \Rightarrow \Xi(1950)$ 

•  $\backslash PgXe \Rightarrow \Xi(2030)$ 

•  $\PagXp \Rightarrow \overline{\Xi}^+$ 

•  $\PagXm \Rightarrow \overline{\Xi}^-$ 

•  $\backslash PagXz \Rightarrow \overline{\Xi}^0$ 

•  $\PcgXp \Rightarrow \Xi_c^+$ 

•  $\backslash PcgXz \Rightarrow \Xi_c^0$ 

• \Pgf  $\Rightarrow \phi$ 

- \Pgfi  $\Rightarrow \phi(1020)$
- \Pgfa  $\Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- \Pgh  $\Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- ullet \Pcgh  $\Rightarrow \eta_{
  m c}$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- \Pcghi  $\Rightarrow \eta_{c}(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- \Pgoa  $\Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $\ \ \, \backslash \texttt{Pgp} \Rightarrow \pi$
- charged pion  $\ \ \, \backslash \texttt{Pgpmp} \, \Rightarrow \, \pi^{\mp}$

- \Pgpa  $\Rightarrow \pi(1300)$
- \Pgpii  $\Rightarrow \pi_2(1670)$
- resonance removed  $\label{eq:pgr} \verb| Pgr > \rho$
- \Pgrp  $\Rightarrow \rho^+$
- \Pgrm  $\Rightarrow 
  ho^-$
- \Pgrpm  $\Rightarrow \rho^{\pm}$
- \Pgrmp  $\Rightarrow \rho^{\mp}$
- \Pgrz  $\Rightarrow \rho^0$
- new  $\parbox{Pgri} \Rightarrow 
  ho(770)$
- \Pgra  $\Rightarrow \rho(1450)$
- \Pgrb  $\Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$
- \PJgy  $\Rightarrow$  **J**/ $\psi$
- \PJgyi  $\Rightarrow$  J/ $\psi(1S)$
- $\bullet \ \backslash \mathrm{Pgy} \Rightarrow \psi$
- \Pgyii  $\Rightarrow \psi(2S)$
- \Pgya  $\Rightarrow \psi(3770)$
- \Pgyb  $\Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- \Pgyd  $\Rightarrow \psi(4415)$

- \PD ⇒ **D**
- $\backslash PDpm \Rightarrow D^{\pm}$
- \PDmp  $\Rightarrow$   $\mathbf{D}^{\mp}$
- $\PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\PDp \Rightarrow D^+$
- \PDst  $\Rightarrow$   $D^*$
- \PaD  $\Rightarrow \overline{D}$
- $\PaDz \Rightarrow \overline{D}^0$
- $\PsDm \Rightarrow D_s^-$
- \PsDp  $\Rightarrow$   $D_s^+$
- $\PsDpm \Rightarrow D_s^{\pm}$
- $\PsDmp \Rightarrow D_s^{\mp}$
- \PsDst  $\Rightarrow$   $D_s^*$
- $\backslash PsDipm \Rightarrow D_{s1}(2536)^{\pm}$
- $\backslash PsDimp \Rightarrow D_{s1}(2536)^{\mp}$
- $\backslash PDiz \Rightarrow D_1(2420)^0$
- \PDstiiz  $\Rightarrow$  D<sub>2</sub>\*(2460)<sup>0</sup>
- \PDstpm  $\Rightarrow$  D\*(2010) $^{\pm}$
- $\backslash PDstmp \Rightarrow D^*(2010)^{\mp}$
- \PDstz  $\Rightarrow$  D\*(2010)<sup>0</sup>

- $\PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\PLmp \Rightarrow L^{\mp}$
- $\backslash PLz \Rightarrow L^0$
- $\Paii \Rightarrow a_2(1320)$
- $\Pai \Rightarrow a_1(1260)$
- $\Paz \Rightarrow a_0(980)$
- \Pbgcia  $\Rightarrow \chi_{b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- \Pbgcza  $\Rightarrow \chi_{b0}(2P)$
- \Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- $\Pbi \Rightarrow b_1(1235)$
- $\Phia \Rightarrow h_1(1170)$
- positive Higgsino  $\begin{tabular}{l} \begin{tabular}{l} \begin{tab$
- negative Higgsino
   \PSHm ⇒ H̄<sup>-</sup>
- charged Higgsino  $\label{eq:PSHmp} \ \Rightarrow \ \widetilde{\mathbf{H}}^{\mp}$

• neutral Higgsino

$$\texttt{\begin{tabular}{l} PSHz \Rightarrow \widetilde{H}^0 \end{tabular}}$$

• wino

$$\PSW \Rightarrow \widetilde{W}$$

• positive wino

$$\PSWp \Rightarrow \widetilde{\mathbf{W}}^+$$

• negative wino

$$\PSWm \Rightarrow \widetilde{\mathbf{W}}^-$$

• wino pm

$$\PSWpm \Rightarrow \widetilde{\mathbf{W}}^{\pm}$$

• wino mp

$$\PSWmp \Rightarrow \widetilde{\mathbf{W}}^{\mp}$$

• zino

$$\PSZ \Rightarrow \widetilde{\mathbf{Z}}$$

• zino

$$\PSZz \Rightarrow \widetilde{\mathbf{Z}}^0$$

• bino

$$\PSB \Rightarrow \widetilde{\mathbf{B}}$$

• selectron

\PSe 
$$\Rightarrow \widetilde{\mathbf{e}}$$

• photino

$$\backslash PSgg \Rightarrow \widetilde{\gamma}$$

• smuon

$$\backslash PSgm \Rightarrow \widetilde{\mu}$$

• sneutrino

$$\PSgn \Rightarrow \widetilde{\nu}$$

• stau

\PSgt 
$$\Rightarrow \widetilde{ au}$$

• chargino/neutralino

$$\texttt{\parbox{PSgx}} \Rightarrow \widetilde{\chi}$$

chargino pm

$$\PSgxpm \Rightarrow \widetilde{\chi}^{\pm}$$

chargino mp

$$\texttt{\parbox{$\backslash$PSgxmp}$} \Rightarrow \widetilde{\chi}^{\mp}$$

neutralino

$$\PSgxz \Rightarrow \widetilde{\chi}^0$$

• lightest neutralino

\PSgxzi 
$$\Rightarrow \widetilde{\chi}_1^0$$

• next-to-lightest neutralino

\PSgxzii 
$$\Rightarrow \widetilde{\chi}_2^0$$

• gluino

$$\PSg \Rightarrow \widetilde{\mathbf{g}}$$

• slepton (generic)

\PS1 
$$\Rightarrow \widetilde{\ell}$$

• anti-slepton (generic)

$$\PaS1 \Rightarrow \tilde{\ell}$$

• squark (generic)

$$\PSq \Rightarrow \widetilde{\mathbf{q}}$$

anti-squark (generic)

$$\PaSq \Rightarrow \bar{\tilde{q}}$$

down squark

$$\PSqd \Rightarrow \widetilde{\mathbf{d}}$$

• up squark

$$\PSqu \Rightarrow \widetilde{\mathbf{u}}$$

strange squark

$$\PSqs \Rightarrow \widetilde{s}$$

• charm squark

$$\PSqc \Rightarrow \widetilde{\mathbf{c}}$$

• bottom squark (sbottom)

$$\PSqb \Rightarrow \widetilde{\mathbf{b}}$$

• top squark (stop)

$$\texttt{\part} \Rightarrow \widetilde{\mathbf{t}}$$

• anti-down squark

$$\PaSqd \Rightarrow \widetilde{\mathbf{d}}$$

• anti-up squark

$$\PaSqu \Rightarrow \overline{\widetilde{u}}$$

• anti-strange squark

$$\texttt{\ \ } \texttt{\ \ } \texttt{\ \ } \mathsf{\ \ } \bar{\widetilde{\mathbf{s}}}$$

• anti-charm squark

$$\PaSqc \Rightarrow \overline{\widetilde{\mathbf{c}}}$$

• anti-bottom squark

$$\PaSqb \Rightarrow \overline{\widetilde{\mathbf{b}}}$$

• anti-top squark (stop)

$$\PaSqt \Rightarrow \overline{\widetilde{\mathbf{t}}}$$

## 7 Italic sans font

• 
$$\backslash PB \Rightarrow B$$

• 
$$\backslash PBm \Rightarrow B^-$$

• 
$$\backslash PBz \Rightarrow B^0$$

• 
$$\backslash PdB \Rightarrow B_d^0$$

• 
$$\backslash PcB \Rightarrow B_c^+$$

• 
$$\backslash PauB \Rightarrow B^-$$

• 
$$\ensuremath{\backslash PacB} \Rightarrow B_c^-$$

• \PasB 
$$\Rightarrow \bar{B}_s^0$$

• neutral kaon 
$$\backslash PKz \Rightarrow K^0$$

• K-long 
$$\begin{tabular}{l} \begin{tabular}{l} \$$

• \PKeiii 
$$\Rightarrow K_{e3}$$

• \PKgmiii 
$$\Rightarrow K_{\mu 3}$$

• \PKzeiii 
$$\Rightarrow K_{e3}^0$$

• \PKzgmiii 
$$\Rightarrow K_{\mu 3}^0$$

• 
$$\begin{tabular}{ll} \begin{tabular}{ll} \b$$

• \PKii 
$$\Rightarrow K_2(1770)$$

- $\backslash PKi \Rightarrow K_1(1270)$
- \PKsti  $\Rightarrow$  K\*(892)
- $\backslash PKsta \Rightarrow K^*(1370)$
- $\backslash PKstb \Rightarrow K^*(1680)$
- \PKstiii  $\Rightarrow K_3^*(1780)$
- \PKstii  $\Rightarrow K_2^*(1430)$
- $\backslash PKstiv \Rightarrow K_4^*(2045)$
- $\backslash PKstz \Rightarrow K_0^*(1430)$
- $\backslash PN \Rightarrow N$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\backslash PNc \Rightarrow N(1535) S_{11}$
- $\backslash PNd \Rightarrow N(1650) S_{11}$
- $\backslash PNe \Rightarrow N(1675) D_{15}$
- $\backslash PNq \Rightarrow N(1700) D_{13}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\backslash PNj \Rightarrow N(2190) G_{17}$
- $\backslash PNk \Rightarrow N(2220) H_{19}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$

- W boson  $\backslash PW \Rightarrow W$
- charged W boson  $\begin{tabular}{l} \bullet & PWpm \Rightarrow W^{\pm} \end{tabular}$
- charged W boson  $\c PWmp \Rightarrow W^{\mp}$

- $\backslash PWR \Rightarrow W_R$
- W-prime boson  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular$
- Z boson  $PZ \Rightarrow Z$

- left-right Z boson  $\parbox{PZLR} \Rightarrow Z_{LR}$

- $\backslash PZgc \Rightarrow Z_{\chi}$
- \PZge  $\Rightarrow Z_n$
- $\protect\ PZgy \Rightarrow Z_{\psi}$
- $\backslash PZi \Rightarrow Z_1$
- standard/heavy Higgs
   \PH ⇒ H
- light Higgs  $\ \ Ph \Rightarrow h$

- negative-charged Higgs
   \PHm ⇒ H<sup>-</sup>

- charged fermion  $\c Pfpm \Rightarrow f^{\pm}$

- lepton  $Pl \Rightarrow \ell$
- charged lepton  $\ensuremath{\backslash Plpm} \Rightarrow \ell^{\pm}$

- negative lepton  $\c Plm \Rightarrow \ell^-$

- $e \ plus/minus$ \\Pepm \Rightarrow e^{\pm}
- e minus/plus\Pemp  $\Rightarrow e^{\mp}$

- $mu \ plus/minus$ \ $Pgmpm \Rightarrow \mu^{\pm}$
- $mu \ minus/plus$ \\Pgmmp \Rightarrow \mu^\pi

- tau lepton  $\begin{tabular}{l} \label{eq:pgtm} \begin{tabular}{l} \labeled{tabular} \begin{tabular}{l} \labele$
- anti-tau  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular}{l}$

- tau anti-neutrino $ackslash Pagnqt \Rightarrow ar{
  u}_{\! au}$
- quark  $Pq \Rightarrow q$

- $\propty Pqb \Rightarrow b$
- $\protect\operatorname{Pqc} \Rightarrow c$
- $\backslash Pqd \Rightarrow d$
- $\propty Pqs \Rightarrow s$
- $\proptyper \proptyper \propty$
- $\propty Pqu \Rightarrow u$
- $\propty Pq \Rightarrow q$

- proton  $Pp \Rightarrow p$

- $\backslash Pcgc \Rightarrow \chi_c$
- $\ensuremath{\mathsf{Pcgcii}} \Rightarrow \chi_{c2}(1P)$
- $\backslash Pcgci \Rightarrow \chi_{c1}(1P)$
- $\ensuremath{\backslash Pcgcz} \Rightarrow \chi_{c0}(1P)$

- $\backslash Pfia \Rightarrow f_1(1390)$
- $\backslash Pfib \Rightarrow f_1(1510)$
- $\backslash Pfiia \Rightarrow f_2(1720)$
- \Pfiib  $\Rightarrow$   $f_2(2010)$
- \Pfiic  $\Rightarrow$   $f_2(2300)$
- \Pfiid  $\Rightarrow$   $f_2(2340)$
- $\backslash Pfiipr \Rightarrow f_2'(1525)$
- $\backslash Pfii \Rightarrow f_2(1270)$
- $\ensuremath{\mbox{\it Pfiv}} \Rightarrow f_4(2050)$
- $Pfza \Rightarrow f_0(1400)$
- $\ensuremath{\backslash Pfzb} \Rightarrow f_0(1590)$
- $\ensuremath{\mbox{\it Pfz}} \Rightarrow f_0(975)$
- $\protect\ PgD \Rightarrow \Delta$
- $\protect\operatorname{PgDa} \Rightarrow \Delta(1232) \protect\operatorname{P}_{33}$
- $\protect\ PgDb \Rightarrow \Delta(1620) S_{31}$
- $\backslash PgDc \Rightarrow \Delta(1700) D_{33}$
- $\prescript{PgDd} \Rightarrow \Delta(1900) S_{31}$
- $\prescript{PgDe} \Rightarrow \Delta(1905) \prescript{F}_{35}$
- $\protect\ PgDf \Rightarrow \Delta(1910)\ P_{31}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\backslash PgDi \Rightarrow \Delta(1930) D_{35}$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$

- $\backslash PgDk \Rightarrow \Delta(2420) H_{3,11}$
- $\backslash PgL \Rightarrow \Lambda$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- $\label{eq:PbgL} \rightarrow \varLambda_b$
- $\backslash PgLa \Rightarrow \Lambda(1405) S_{01}$
- $\backslash PgLb \Rightarrow \Lambda(1520) D_{03}$
- $\backslash PgLc \Rightarrow \Lambda(1600) P_{01}$
- $\backslash PgLd \Rightarrow \Lambda(1670) S_{01}$
- \PgLe  $\Rightarrow \Lambda(1690) D_{03}$
- $\backslash PgLf \Rightarrow \Lambda(1800) S_{01}$
- $\backslash PqLq \Rightarrow \Lambda(1810) P_{01}$
- $\prescript{PgLi} \Rightarrow \Lambda(1830) D_{05}$
- $\prescript{PgLk} \Rightarrow \Lambda(2100) G_{07}$
- $\prescript{PgLl} \Rightarrow \Lambda(2110) \prescript{F}_{05}$
- $\prescript{PgLm} \Rightarrow \Lambda(2350) \prescript{H}_{09}$
- \Pg0  $\Rightarrow \Omega$
- $\propty PgOpm \Rightarrow \Omega^{\pm}$
- ullet \PgOmp  $\Rightarrow \Omega^{\mp}$
- $\backslash PgOp \Rightarrow \Omega^+$
- $\protect\operatorname{PgOm} \Rightarrow \protect\Omega^-$
- $\prescript{PgOma} \Rightarrow \Omega(2250)^-$

- new
  - $\PagO \Rightarrow \overline{\Omega}$
- \PagOm  $\Rightarrow \overline{\Omega}^-$
- \PgS  $\Rightarrow \Sigma$
- $\propty PqSpm \Rightarrow \propty \Sigma^{\pm}$
- ullet \PgSmp  $\Rightarrow \Sigma^{\mp}$
- \PqSm  $\Rightarrow \Sigma^-$
- $\propty PgSp \Rightarrow \propty^+$
- $\backslash PqSz \Rightarrow \Sigma^0$
- $\backslash PcgS \Rightarrow \Sigma_c$
- \PaqSm  $\Rightarrow \bar{\Sigma}^-$
- \PaqSp  $\Rightarrow \overline{\Sigma}^+$
- $\backslash PacgS \Rightarrow \overline{\Sigma}_c$
- $\prescript{PgSa} \Rightarrow \Sigma(1385) \prescript{P}_{13}$
- $\backslash PqSb \Rightarrow \Sigma(1660) P_{11}$
- $\backslash PqSc \Rightarrow \Sigma(1670) D_{13}$
- $\backslash PgSd \Rightarrow \Sigma(1750) S_{11}$
- \PgSe  $\Rightarrow \Sigma(1775) D_{15}$
- $\backslash PgSf \Rightarrow \Sigma(1915) F_{15}$
- $\backslash PgSg \Rightarrow \Sigma(1940) D_{13}$

- \PgSi  $\Rightarrow \Sigma(2050)$
- \PcgSi  $\Rightarrow \Sigma_c(2455)$
- $\backslash PgU \Rightarrow \Upsilon$
- $\propty PgUi \Rightarrow \Upsilon(1S)$
- $\propty PgUa \Rightarrow \Upsilon(2S)$
- \PgUb  $\Rightarrow \Upsilon(3S)$
- \PgUc  $\Rightarrow \Upsilon(4S)$
- $\backslash PgUd \Rightarrow \Upsilon(10860)$
- \PgUe  $\Rightarrow \Upsilon(11020)$
- $\backslash PgX \Rightarrow \Xi$
- $\propty PgXp \Rightarrow \Xi^+$
- $\protect\ PgXm \Rightarrow \Xi^-$
- $\backslash PqXz \Rightarrow \Xi^0$
- $\protect\operatorname{PgXa} \Rightarrow \Xi(1530) P_{13}$
- $\prescript{PgXb} \Rightarrow \Xi(1690)$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$
- $\prescript{PgXd} \Rightarrow \Xi(1950)$
- $\prescript{PgXe} \Rightarrow \Xi(2030)$
- $\PagXp \Rightarrow \bar{\Xi}^+$

- $\propty PcgXp \Rightarrow \Xi_c^+$
- $\backslash PcgXz \Rightarrow \Xi_c^0$
- $\protect\ Pgf \Rightarrow \phi$

- $\prescript{Pgfi} \Rightarrow \phi(1020)$
- $\prescript{Pgfa} \Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- $\propty Pgh \Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- \Pcgh  $\Rightarrow \eta_c$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- \Pcghi  $\Rightarrow \eta_c(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- \Pgoa  $\Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $\begin{tabular}{l} \bullet & pion \\ \begin{tabular}{l} \begin{tabul$

- $\protect\operatorname{Pgpa} \Rightarrow \pi(1300)$
- $\prescript{Pgpii} \Rightarrow \pi_2(1670)$
- resonance removed  $\c Pgr \Rightarrow 
  ho$
- $\backslash Pgrp \Rightarrow \rho^+$
- $\backslash Pgrm \Rightarrow \rho^-$
- $\ensuremath{\mbox{\sc Pgrpm}} \Rightarrow \ensuremath{\mbox{\sc $\rho$}}^\pm$
- $\bullet \ \ \backslash \textit{Pgrmp} \Rightarrow \rho^{\mp}$
- $\backslash Pgrz \Rightarrow \rho^0$
- new  $\parbox{Pgri} \Rightarrow \rho(770)$
- \Pgra  $\Rightarrow \rho(1450)$
- $\protect\operatorname{Pgrb} \Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$
- $\protect\ PJgy \Rightarrow \protect\ J/\psi$
- \ $PJgyi \Rightarrow J/\psi(1S)$
- $\protect\ Pgy \Rightarrow \psi$
- $\ensuremath{\mathsf{VPgyii}} \Rightarrow \psi(2\ensuremath{\mathsf{S}})$
- \Pgya  $\Rightarrow \psi(3770)$
- $\ensuremath{\mbox{\sc Pgyb}} \Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- $\bullet \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \psi({\it 4415})$

- $\backslash PD \Rightarrow D$
- $\proptype \proptype D^{\pm}$
- $\proptypersuppressu$
- $\backslash PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\backslash PDp \Rightarrow D^+$
- \PDst  $\Rightarrow$   $D^*$
- $\backslash PaDz \Rightarrow \bar{D}^0$
- $\backslash PsDm \Rightarrow D_s^-$
- $\ensuremath{\backslash PsDp} \Rightarrow D_s^+$
- $\ensuremath{\backslash \textit{PsDpm}} \Rightarrow D_s^{\pm}$
- \PsDmp  $\Rightarrow D_s^{\mp}$
- \PsDs $t \Rightarrow D_s^*$
- $\backslash PsDipm \Rightarrow D_{s1}(2536)^{\pm}$
- $\ensuremath{\backslash PsDimp} \Rightarrow D_{s1}(2536)^{\mp}$
- $\backslash PDiz \Rightarrow D_1(2420)^0$
- \PDstiiz  $\Rightarrow D_2^*(2460)^0$
- $\propty PDstpm \Rightarrow D^*(2010)^{\pm}$
- \PDstmp  $\Rightarrow D^*(2010)^{\mp}$
- \PDstz  $\Rightarrow$   $D^*(2010)^0$

- $\backslash PEz \Rightarrow E^0$
- $\backslash PLpm \Rightarrow L^{\pm}$
- $\ensuremath{\backslash PLmp} \Rightarrow \ensuremath{L^{\mp}}$
- $\backslash PLz \Rightarrow L^0$

- \Pbgcia  $\Rightarrow \chi_{b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- \Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$

- wino pm  $\ \ \, \backslash PSWpm \Rightarrow \, \widetilde{W}^{\pm}$
- wino mp  $\ \ \, \backslash {\it PSWmp} \, \Rightarrow \, \widetilde{W}^{\mp}$
- zino  $PSZz \Rightarrow \widetilde{Z}^0$

- ullet stau  $lacksquare PSqt <math>\Rightarrow \widetilde{ au}$

- neutralino  $\begin{tabular}{l} \begin{tabular}{l} \begin{tabular}{$

• charm squark

$$\PSqc \Rightarrow \widetilde{c}$$

• bottom squark (sbottom)

• anti-up squark

ullet anti-strange squark  $igwedge PaSqs \Rightarrow ar{\widetilde{s}}$ 

• anti-bottom squark

• anti-top squark (stop)

$$ackslash extit{PaSq}\, t \Rightarrow ar{\widetilde{t}}$$

## 8 Bold italic sans font

• 
$$\backslash PBz \Rightarrow B^0$$

• 
$$\backslash PdB \Rightarrow B_d^0$$

• 
$$\backslash PauB \Rightarrow B^-$$

• 
$$\PacB \Rightarrow B_c^-$$

$$\backslash PK \Rightarrow \mathbf{K}$$

$$\PKm \Rightarrow K^-$$

$$\backslash PKp \Rightarrow \mathbf{K}^+$$

neutral kaon

$$\backslash PKz \Rightarrow \mathsf{K}^0$$

• K-long

• K-short

$$\backslash PKzS \Rightarrow \mathsf{K}_{\mathsf{S}}^{0}$$

• K star

$$\PKst \Rightarrow \mathbf{K}^*$$

• anti-kaon

• neutral anti-kaon

• \PKeiii 
$$\Rightarrow$$
  $K_{e3}$ 

• 
$$\propty PKgmiii \Rightarrow K_{\mu 3}$$

• \PKzeiii 
$$\Rightarrow \mathsf{K}_{\mathrm{e}3}^0$$

• \PKzgmiii 
$$\Rightarrow \mathsf{K}_{\mu 3}^0$$

• 
$$\begin{tabular}{ll} \begin{tabular}{ll} \b$$

• 
$$\begin{tabular}{ll} \begin{tabular}{ll} \b$$

- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\protect\operatorname{\mathsf{PKsti}} \Rightarrow \mathsf{K}^*(892)$
- $\prescript{PKsta} \Rightarrow \prescript{K}^*(1370)$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\backslash PKstiii \Rightarrow K_3^*(1780)$
- $\backslash PKstii \Rightarrow K_2^*(1430)$
- $\prescript{PKstiv} \Rightarrow \prescript{K_4^*(2045)}$
- $\backslash PKstz \Rightarrow \mathsf{K}_0^*(1430)$
- $\backslash PN \Rightarrow N$
- $\prescript{PNa} \Rightarrow N(1440) P_{11}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\prescript{PNc} \Rightarrow N(1535) S_{11}$
- $\bullet \ \ \backslash \underline{\textit{PNd}} \ \Rightarrow \ N(1650) \ S_{11}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\prescript{PNf} \Rightarrow N(1680) \prescript{F}_{15}$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\begin{tabular}{l} \begin{tabular}{l} \begin{ta$
- $\bullet \ \ {}^{\mbox{\it PNm}} \Rightarrow N(2600) \ I_{1,11}$

- gluon  $Pg \Rightarrow g$

- W boson\PW ⇒ W
- charged W boson  $\parbox{$\backslash$PWpm$} \Rightarrow \parbox{$W^{\pm}$}$
- charged W boson  $\begin{tabular}{l} \bullet & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf{W} \\ \mathsf{W} & \mathsf{W} & \mathsf$
- W-minus  $PWm \Rightarrow W^-$
- $\propty PWR \Rightarrow W_R$
- W-prime boson  $\parbox{$\setminus$PWpr$}\Rightarrow \parbox{$W'$}$
- Z boson\PZ ⇒ Z
- neutral **Z** boson  $PZz \Rightarrow Z^0$
- Z-prime boson  $\parbox{$\backslash$PZpr$}\Rightarrow \propty{$\mathsf{Z}'$}$
- left-right Z boson  $\parbox{$\backslash$PZLR$} \Rightarrow \parbox{$Z_{LR}$}$

- $\PZgc \Rightarrow \mathbf{Z}_{\chi}$
- $\protect\ PZge \Rightarrow \protect\ \prot$
- $\protect\ PZgy\ \Rightarrow\ \mathbf{Z}_{\psi}$
- $\backslash PZi \Rightarrow \mathbf{Z}_1$
- standard/heavy Higgs
   \PH ⇒ H
- explicitly neutral standard/heavy
   Higgs
   \PHz ⇒ H<sup>0</sup>
- light Higgs
   \Ph ⇒ h
- explicitly neutral light Higgs
   \Phz ⇒ h<sup>0</sup>
- pseudoscalar Higgs
   \PA ⇒ A
- explicitly neutral pseudoscalar Higgs
   \PAz ⇒ A<sup>0</sup>

- positive-charged Higgs
   \PHp ⇒ H<sup>+</sup>
- negative-charged Higgs
   \PHm ⇒ H<sup>-</sup>

- charged fermion  $\ensuremath{\backslash Pfpm} \Rightarrow f^{\pm}$

- negative fermion
   \Pfm ⇒ f<sup>-</sup>
- lepton  $Pl \Rightarrow \ell$

- positive lepton  $Plp \Rightarrow \ell^+$
- negative lepton  $\begin{tabular}{l} \bullet & \text{plm} \Rightarrow \ell^- \end{tabular}$
- generic neutrino  $\parbox{$\backslash$Pqn$} \Rightarrow \nu$
- neutrino (for lepton ell)  $\begin{subarray}{c} \verb+Pgnl+ \Rightarrow \nu_\ell \end{subarray}$

• generic anti-neutrino

$$\Pagn \Rightarrow \bar{\nu}$$

• anti-neutrino (for lepton ell)

$$\Pagnl \Rightarrow \bar{\nu_{\ell}}$$

• electronic

• e plus/minus

$$\ensuremath{\backslash Pepm} \Rightarrow \mathbf{e}^{\pm}$$

• e minus/plus

$$\ensuremath{\setminus} \textit{Pemp} \ \Rightarrow \ \mathbf{e}^{\mp}$$

electron

$$\ensuremath{\mbox{\sc Pem}} \Rightarrow \mathbf{e}^-$$

• positron

$$\ensuremath{\backslash Pep} \Rightarrow \mathbf{e}^+$$

• muonic

$$\Pagm \Rightarrow \mu$$

• mu plus/minus

$$\Page 1999 \Rightarrow \mu^{\pm}$$

• mu minus/plus

$$\label{eq:pgmmp} ackslash p^{\mp}$$

• muon

$$\propty Pgmm \Rightarrow \mu^-$$

• anti-muon

$$\propto Pamp \Rightarrow \mu^+$$

• tauonic

$$\proptype Pqt \Rightarrow au$$

• tau plus/minus

$$\propty Pqtpm \Rightarrow au^{\pm}$$

tau minus/plus

$$\propty Pqtmp \Rightarrow au^{\mp}$$

• tau lepton

$$\protect\operatorname{Pgtm} \Rightarrow au^-$$

• anti-tau

$$\propty Pgtp \Rightarrow au^+$$

• electron neutrino

$$\land Pgne \Rightarrow \nu_e$$

• muon neutrino

$$\backslash Pgngm \Rightarrow \nu_{\mu}$$

• tau neutrino

$$\Pgngt \Rightarrow \nu_{\tau}$$

electron anti-neutrino

$$\land Pagne \Rightarrow \bar{\nu_{e}}$$

• muon anti-neutrino

$$\backslash Pagngm \Rightarrow \bar{\nu_{\mu}}$$

• tau anti-neutrino

$$\Pagnqt \Rightarrow \bar{\nu_{\tau}}$$

quark

$$Pq \Rightarrow q$$

• anti-quark

down quark

$$\backslash Pqd \Rightarrow \mathbf{d}$$

• up quark

$$\backslash Pqu \Rightarrow \mathbf{u}$$

• strange quark

$$\Pqs \Rightarrow s$$

- charm quark
  - $\Pgc \Rightarrow c$
- bottom quark
  - $\Pqb \Rightarrow \mathbf{b}$
- top quark
  - $\Pqt \Rightarrow t$
- down anti-quark
- up anti-quark
- strange anti-quark
  - $\Paqs \Rightarrow \bar{s}$
- charm anti-quark
  - $\Paqc \Rightarrow \bar{c}$
- bottom anti-quark
- top anti-quark
  - $\Paqt \Rightarrow \mathbf{t}$
- $\backslash Pqb \Rightarrow \mathbf{b}$
- $\backslash Pqc \Rightarrow c$
- $\backslash Pqd \Rightarrow d$
- $\propty Pqs \Rightarrow s$
- $\propto Pqt \Rightarrow t$
- $\backslash Pqu \Rightarrow u$
- $\backslash Pq \Rightarrow q$

- anti-bottom quark
- anti-charm quark
  - $\Paqc \Rightarrow \bar{c}$
- anti-down quark
- anti-strange quark
  - $\Paqs \Rightarrow \bar{s}$
- anti-top quark
  - $\Paqt \Rightarrow \mathbf{t}$
- anti-up quark
  - $\Paqu \Rightarrow \bar{\mathbf{u}}$
- anti-quark
- proton
  - $Pp \Rightarrow p$
- neutron
  - $\backslash Pn \Rightarrow n$
- anti-proton
  - $\Pap \Rightarrow \bar{p}$
- anti-neutron
- \Pcgc  $\Rightarrow \chi_{c}$
- $\ensuremath{\mbox{\sc Pcgcii}} \Rightarrow \chi_{c2}(1P)$
- \Pcgci  $\Rightarrow \chi_{c1}(1P)$
- $\backslash Pcgcz \Rightarrow \chi_{c0}(1P)$

- $\backslash Pfia \Rightarrow f_1(1390)$
- $\backslash Pfib \Rightarrow f_1(1510)$
- $\backslash Pfiia \Rightarrow f_2(1720)$
- $\propty Pfiib \Rightarrow f_2(2010)$
- $\backslash Pfiic \Rightarrow f_2(2300)$
- $\backslash Pfiid \Rightarrow f_2(2340)$
- $\protect\ Pfiipr \Rightarrow f_2'(1525)$
- $\backslash Pfii \Rightarrow f_2(1270)$
- $\backslash Pfiv \Rightarrow f_4(2050)$
- $\backslash Pfi \Rightarrow f_1(1285)$
- $\prescript{Pfza} \Rightarrow f_0(1400)$
- $\prescript{Pfzb} \Rightarrow f_0(1590)$
- $\prescript{Pfz} \Rightarrow f_0(975)$
- $\propty PgD \Rightarrow \Delta$
- $\propty PgDa \Rightarrow \Delta(1232) \propty P_{33}$
- $\propty PgDb \Rightarrow \Delta(1620) S_{31}$
- $\propty PgDc \Rightarrow \Delta(1700) D_{33}$
- $\prescript{PgDd} \Rightarrow \Delta(1900) S_{31}$
- $\prescript{PgDe} \Rightarrow \Delta(1905) \prescript{F}_{35}$
- $\prescript{PgDf} \Rightarrow \Delta(1910) \prescript{P}_{31}$
- $\prescript{PgDh} \Rightarrow \Delta(1920) \prescript{P}_{33}$
- $\prescript{PgDi} \Rightarrow \Delta(1930) \prescript{D}_{35}$
- $\protect\operatorname{PgDj} \Rightarrow \Delta(1950) \protect\operatorname{F}_{37}$

- $\propty PgDk \Rightarrow \Delta(2420) \propty H_{3,11}$
- $\backslash PgL \Rightarrow \Lambda$
- $\PagL \Rightarrow \bar{\Lambda}$
- $\backslash PcgLp \Rightarrow \Lambda_c^+$
- $\propty PbgL \Rightarrow \Lambda_b$
- $\propty PgLa \Rightarrow \Lambda(1405) S_{01}$
- $\propty PgLb \Rightarrow \Lambda(1520) D_{03}$
- $\propty PgLc \Rightarrow \Lambda(1600) \propty P_{01}$
- $\propty PgLd \Rightarrow \Lambda(1670) S_{01}$
- $\backslash PgLe \Rightarrow \Lambda(1690) D_{03}$
- $\backslash PgLf \Rightarrow \Lambda(1800) S_{01}$
- $\propty PgLg \Rightarrow \Lambda(1810) P_{01}$
- $\prescript{PgLh} \Rightarrow \Lambda(1820) \prescript{F}_{05}$
- $\prescript{PgLi} \Rightarrow \Lambda(1830) \prescript{D}_{05}$
- $\prescript{PgLj} \Rightarrow \Lambda(1890) \prescript{P}_{03}$
- $\propty PgLk \Rightarrow \Lambda(2100) G_{07}$
- $\propty PgLl \Rightarrow \Lambda(2110) \propty F_{05}$
- \PgLm  $\Rightarrow \Lambda(2350) H_{09}$
- $\protect\ PgO \Rightarrow \Omega$
- \PqOpm  $\Rightarrow \Omega^{\pm}$
- \PgOmp  $\Rightarrow \Omega^{\mp}$
- $\propty PgOp \Rightarrow \Omega^+$
- \PgOm  $\Rightarrow \Omega^-$

new

•  $\PagOp \Rightarrow \bar{\Omega}^+$ 

• \PagOm  $\Rightarrow \bar{\Omega}^-$ 

•  $\backslash PqS \Rightarrow \Sigma$ 

•  $\propty PqSpm \Rightarrow \Sigma^{\pm}$ 

•  $\propty PqSmp \Rightarrow \mathbf{\Sigma}^{\mp}$ 

•  $\propty PgSm \Rightarrow \Sigma^-$ 

•  $\propty PgSp \Rightarrow \Sigma^+$ 

•  $\backslash PqSz \Rightarrow \Sigma^0$ 

•  $\propty PcgS \Rightarrow \Sigma_c$ 

•  $\PagSm \Rightarrow \bar{\Sigma}^-$ 

•  $\PagSp \Rightarrow \bar{\Sigma}^+$ 

•  $\PagSz \Rightarrow \bar{\Sigma}^0$ 

•  $\PacgS \Rightarrow \bar{\Sigma}_c$ 

•  $\prescript{PgSa} \Rightarrow \Sigma(1385) \prescript{P}_{13}$ 

•  $\prescript{PgSb} \Rightarrow \Sigma(1660) \prescript{P}_{11}$ 

•  $\prescript{PgSc} \Rightarrow \Sigma(1670) \prescript{D}_{13}$ 

•  $\propty PgSd \Rightarrow \Sigma(1750) S_{11}$ 

•  $\prescript{PgSe} \Rightarrow \Sigma(1775) \ D_{15}$ 

•  $\prescript{PgSf} \Rightarrow \Sigma(1915) \prescript{F}_{15}$ 

•  $\prescript{PgSg} \Rightarrow \Sigma(1940) \prescript{D}_{13}$ 

•  $\propty PgSh \Rightarrow \Sigma(2030) \propty F_{17}$ 

•  $\prescript{PgSi} \Rightarrow \Sigma(2050)$ 

•  $\ensuremath{\mbox{\sc PcgSi}}\ \Rightarrow \ensuremath{\mbox{\sc $\Sigma_{\rm c}$}}\ (2455)$ 

•  $\propty PgU \Rightarrow \Upsilon$ 

•  $\propty PgUi \Rightarrow \Upsilon(1S)$ 

•  $\propty PgUa \Rightarrow \Upsilon(2S)$ 

•  $\propty PqUb \Rightarrow \Upsilon(3S)$ 

•  $\propty PgUc \Rightarrow \Upsilon(4S)$ 

•  $\prescript{PgUd} \Rightarrow \Upsilon(10860)$ 

•  $\prescript{PgUe} \Rightarrow \Upsilon(11020)$ 

•  $\propty PgX \Rightarrow \Xi$ 

•  $\propty PgXp \Rightarrow \Xi^+$ 

•  $\propty PqXm \Rightarrow \Xi^-$ 

•  $\propty PgXz \Rightarrow \Xi^0$ 

• \PgXa  $\Rightarrow \Xi(1530) P_{13}$ 

•  $\propty PgXb \Rightarrow \Xi(1690)$ 

•  $\prescript{PgXc} \Rightarrow \Xi(1820) \prescript{D}_{13}$ 

•  $\prescript{PgXd} \Rightarrow \Xi(1950)$ 

• \PgXe  $\Rightarrow \Xi(2030)$ 

•  $\PagXp \Rightarrow \bar{\Xi}^+$ 

•  $\PagXm \Rightarrow \bar{\Xi}^-$ 

•  $\protect\operatorname{PcgXp} \Rightarrow \Xi_{\mathrm{c}}^+$ 

•  $\backslash Pgf \Rightarrow \phi$ 

- $\prescript{Pgfi} \Rightarrow \phi(1020)$
- $\propty Pgfa \Rightarrow \phi(1680)$
- \Pgfiii  $\Rightarrow \phi_3(1850)$
- $\propty Pgh \Rightarrow \eta$
- \Pghpr  $\Rightarrow \eta'$
- \Pcgh  $\Rightarrow \eta_{\rm c}$
- \Pgha  $\Rightarrow \eta(1295)$
- \Pghb  $\Rightarrow \eta(1440)$
- \Pghpri  $\Rightarrow \eta'(958)$
- \Pcghi  $\Rightarrow \eta_{c}(1S)$
- \Pgo  $\Rightarrow \omega$
- \Pgoi  $\Rightarrow \omega(783)$
- $\propty Pgoa \Rightarrow \omega(1390)$
- \Pgob  $\Rightarrow \omega(1600)$
- \Pgoiii  $\Rightarrow \omega(3)^{1670}$
- pion  $Pgp \Rightarrow \pi$

- positive pion  $\ \ \, \backslash \textit{Pgpp} \ \Rightarrow \ \pi^+$

- $\prescript{Pgpa} \Rightarrow \pi(1300)$
- $Pgpii \Rightarrow \pi_2(1670)$
- \Pgrp  $\Rightarrow \rho^+$
- \Pgrm  $\Rightarrow \rho^-$
- \Pgrpm  $\Rightarrow \rho^{\pm}$
- \Pgrmp  $\Rightarrow \rho^{\mp}$
- \Pgrz  $\Rightarrow \rho^0$
- new  $\parbox{${
  m Pgr}$$} i \Rightarrow 
  ho(770)$
- \Pgra  $\Rightarrow \rho(1450)$
- \Pgrb  $\Rightarrow \rho(1700)$
- \Pgriii  $\Rightarrow \rho_3(1690)$
- $\PJgy \Rightarrow J/\psi$
- \ $PJgyi \Rightarrow J/\psi(1S)$
- $\protect\ Pgy \Rightarrow \psi$
- \Pgyii  $\Rightarrow \psi(2S)$
- \Pgya  $\Rightarrow \psi(3770)$
- $\prescript{Pgyb} \Rightarrow \psi(4040)$
- \Pgyc  $\Rightarrow \psi(4160)$
- \Pgyd  $\Rightarrow \psi(4415)$

- \*PD* ⇒ **D**
- $\backslash PDpm \Rightarrow D^{\pm}$
- $\proptype \proptype \p$
- $\backslash PDz \Rightarrow D^0$
- $\backslash PDm \Rightarrow D^-$
- $\backslash PDp \Rightarrow D^+$
- $\protect\operatorname{PDs} t \Rightarrow \mathbf{D}^*$

- $\backslash PsDm \Rightarrow D_s^-$
- $\PsDpm \Rightarrow D_s^{\pm}$
- $\ensuremath{\backslash \textit{PsDmp}} \Rightarrow \ensuremath{\mathsf{D}}_{\mathsf{s}}^{\mp}$
- \PsDst  $\Rightarrow$   $D_s^*$
- $\ensuremath{\backslash PsDipm} \Rightarrow D_{s1}(2536)^{\pm}$
- $\ensuremath{\backslash \textit{PsDimp}} \Rightarrow D_{s1}(2536)^{\mp}$
- $\backslash PDiz \Rightarrow D_1(2420)^0$
- \PDstiiz  $\Rightarrow$   $D_2^*(2460)^0$
- $\propty PDstpm \Rightarrow D^*(2010)^{\pm}$
- $\parbox{$\backslash$PDstmp$} \Rightarrow \parbox{$D^*(2010)^{\mp}$}$
- $\propty PDstz \Rightarrow D^*(2010)^0$

- $\backslash PEz \Rightarrow E^0$
- $\propty PLpm \Rightarrow L^{\pm}$
- $\propty PLmp \Rightarrow L^{\mp}$
- $\backslash PLz \Rightarrow L^0$

- \Pbgcia  $\Rightarrow \chi_{b1}(2P)$
- \Pbgciia  $\Rightarrow \chi_{b2}(2P)$
- \Pbgcii  $\Rightarrow \chi_{b2}(1P)$
- \Pbgci  $\Rightarrow \chi_{b1}(1P)$
- $\propty Pbgcza \Rightarrow \chi_{b0}(2P)$
- \\Pbgcz  $\Rightarrow \chi_{b0}(1P)$
- $\begin{tabular}{l} \begin{tabular}{l} \bullet \begin{tabular}{l} \begin{$
- $\begin{tabular}{ll} \begin{tabular}{ll} \b$

• neutral Higgsino

$$\PSHz \Rightarrow \widetilde{\mathsf{H}}^0$$

wino

$$\backslash PSW \Rightarrow \widetilde{\mathbf{W}}$$

• positive wino

$$\PSWp \Rightarrow \widetilde{\mathbf{W}}^+$$

• negative wino

$$\PSWm \Rightarrow \widetilde{\mathbf{W}}^-$$

• wino pm

$$\PSWpm \Rightarrow \widetilde{\mathbf{W}}^{\pm}$$

• wino mp

$$\PSWmp \Rightarrow \widetilde{\mathbf{W}}^{\mp}$$

• zino

$$\backslash PSZ \Rightarrow \widetilde{\mathbf{Z}}$$

• zino

$$PSZz \Rightarrow \widetilde{\mathbf{Z}}^0$$

• bino

$$\PSB \Rightarrow \widetilde{\mathbf{B}}$$

• selectron

$$\PSe \Rightarrow \widetilde{\mathbf{e}}$$

• photino

$$\PSqq \Rightarrow \widetilde{\gamma}$$

• smuon

$$\PSqm \Rightarrow \widetilde{\mu}$$

• sneutrino

$$\PSqn \Rightarrow \widetilde{\nu}$$

• stau

$$\PSgt \Rightarrow \widetilde{ au}$$

• chargino/neutralino

$$\PSgx \Rightarrow \widetilde{\chi}$$

chargino pm

$$\PSgxpm \Rightarrow \widetilde{\chi}^{\pm}$$

chargino mp

$$\PSgxmp \Rightarrow \widetilde{\chi}^{\mp}$$

neutralino

$$\PSqxz \Rightarrow \widetilde{\chi}^0$$

• lightest neutralino

$$\PSgxzi \Rightarrow \widetilde{\chi}_1^0$$

• next-to-lightest neutralino

$$\PSqxzii \Rightarrow \widetilde{\chi}_2^0$$

gluino

$$\PSg \Rightarrow \widetilde{\mathbf{g}}$$

• slepton (generic)

$$\PSl \Rightarrow \widetilde{\ell}$$

• anti-slepton (generic)

$$\Pasi \Rightarrow \tilde{\ell}$$

• squark (generic)

$$\backslash PSq \Rightarrow \widetilde{\mathbf{q}}$$

anti-squark (generic)

down squark

$$\backslash PSqd \Rightarrow \widetilde{\mathbf{d}}$$

• up squark

$$\PSqu \Rightarrow \widetilde{\mathbf{u}}$$

• strange squark

$$\PSqs \Rightarrow \widetilde{\mathbf{s}}$$

• charm squark

$$\PSqc \Rightarrow \widetilde{\mathbf{c}}$$

• bottom squark (sbottom)

$$\PSqb \Rightarrow \widetilde{\mathbf{b}}$$

• top squark (stop)

$$\PSqt \Rightarrow \widetilde{\mathbf{t}}$$

 $\bullet \ \ \text{anti-down squark} \\ \bullet \ \ \underset{\sim}{\text{anti-down}}$ 

• anti-up squark

$$\PaSqu \Rightarrow \bar{\widetilde{\mathbf{u}}}$$

• anti-strange squark

$$\PaSqs \Rightarrow \tilde{\widetilde{\mathbf{s}}}$$

• anti-charm squark

$$\PaSqc \Rightarrow \overline{\widetilde{\mathbf{c}}}$$

• anti-bottom squark

$$\PaSqb \Rightarrow \bar{\widetilde{\mathbf{b}}}$$

• anti-top squark (stop)