$D^*(2007)^0$

$I(J^P) = \frac{1}{2}(1^-)$
I, J, P need confirmation.

Mass $m = 2006.7 \pm 0.5$ MeV
$m_{D^{*0}} - m_{D^0} = 142.12 \pm 0.07$ MeV
Full width $\Gamma < 2.1$ MeV, CL = 90%

$\overline{D}^*(2007)^0$ modes are charge conjugates of modes below.

$D^*(2007)^0$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$D^0 \pi^0$	(64 ± 4) %	43
$D^0 \gamma$	(36 ± 4) %	137

$D^*(2010)^\pm$

$I(J^P) = \frac{1}{2}(1^-)$
I, J, P need confirmation.

Mass $m = 2010.0 \pm 0.5$ MeV
$m_{D^*(2010)^+} - m_{D^+} = 140.64 \pm 0.09$ MeV
$m_{D^*(2010)^+} - m_{D^0} = 145.42 \pm 0.05$ MeV
Full width $\Gamma < 0.131$ MeV, CL = 90%

$D^*(2010)^-$ modes are charge conjugates of the modes below.

$D^*(2010)^\pm$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$D^0 \pi^+$	(68.1 ± 1.6) %	39
$D^+ \pi^0$	(30.8 ± 0.9) %	38
$D^+ \gamma$	$(\ 1.1\pm2.1)$ %	136

$D_1(2420)^0$

$I(J^P) = \frac{1}{2}(1^+)$
I, J, P need confirmation.

Mass $m = 2422.8 \pm 3.2$ MeV (S = 1.6)
Full width $\Gamma = 18^{+6}_{-4}$ MeV

$\overline{D}_1(2420)^0$ modes are charge conjugates of modes below.

$D_1(2420)^0$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$D^*(2010)^+ \pi^-$	seen	355
$D^+ \pi^-$	not seen	474

$D_2^*(2460)$

$I(J^P) = \frac{1}{2}(2^+)$

$J^P = 2^+$ assignment strongly favored (ALBRECHT 89B).

Mass $m_{D_2^*(2460)^0} = 2457.7 \pm 1.9$ MeV
Mass $m_{D_2^*(2460)^\pm} = 2456 \pm 6$ MeV (S = 2.0)
$m_{D_2^*(2460)^\pm} - m_{D_2^*(2460)^0} = 2 \pm 5$ MeV (S = 1.4)
Full width $\Gamma_{D_2^*(2460)^0} = 21 \pm 5$ MeV
Full width $\Gamma_{D_2^*(2460)^\pm} = 23 \pm 10$ MeV

$\overline{D}_2^*(2460)$ modes are charge conjugates of modes below.

$D_2^*(2460)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$D_2^*(2460)^0 \to D^+ \pi^-$	seen	503
$D_2^*(2460)^0 \to D^*(2010)^+ \pi^-$	seen	387
$D_2^*(2460)^\pm \to D^0 \pi^+$	seen	505

CHARMED, STRANGE MESONS
$(C = S = \pm1)$

$D_s^+ = c\overline{s}$, $D_s^- = \overline{c}s$, similarly for D_s^*'s

$D_s^\pm$ was $F^\pm$

$I(J^P) = 0(0^-)$

Mass $m = 1968.5 \pm 0.7$ MeV (S = 1.2)
$m_{D_s^\pm} - m_{D^\pm} = 99.1 \pm 0.6$ MeV (S = 1.1)
Mean life $\tau = (0.467 \pm 0.017) \times 10^{-12}$ s
$c\tau = 140$ μm

Branching fractions for modes below with a resonance in the final state include all the decay modes of the resonance. D_s^- modes are charge conjugates of the modes below.

Nearly all other modes are measured relative to the $\phi\pi^+$ mode. However, none of the determinations of the $\phi\pi^+$ branching fraction are direct measurements: all rely on calculated relations between D^+ and D_s^+ decay widths, on estimates of D_s^+ cross sections, or on other model-dependent assumptions. Thus a better determination of the $\phi\pi^+$ branching fraction could cause the other branching fractions to slide up or down, all together.

D_s^+ DECAY MODES		Fraction (Γ_i/Γ)	Scale factor/ Confidence level	p (MeV/c)
Inclusive modes				
K^- anything		$(13\ {}^{+14}_{-12})$ %		–
$\overline{K}^0$ anything + K^0 anything		(39 ± 28) %		–
K^+ anything		$(20\ {}^{+18}_{-14})$ %		–
non-$K\overline{K}$ anything		(64 ± 17) %		–
e^+ anything		< 20 %	CL=90%	–
Leptonic and semileptonic modes				
$\mu^+ \nu_\mu$		$(5.9 \pm 2.2) \times 10^{-3}$	S=1.1	981
$\phi \ell^+ \nu_\ell$	[pp]	(1.88 ± 0.29) %		–
$\eta \mu^+ \nu_\mu + \eta'(958) \mu^+ \nu_\mu$		(7.4 ± 3.2) %		–
$\quad \eta \mu^+ \nu_\mu$				905
$\quad \eta'(958) \mu^+ \nu_\mu$		< 3.0 %	CL=90%	747
Hadronic modes with two K's (including from ϕ's)				
$K^+ \overline{K}^0$		(3.5 ± 0.7) %		850
$K^+ K^- \pi^+$	[qq]	(4.8 ± 0.7) %		805
$\quad \phi \pi^+$		(3.5 ± 0.4) %		712
$\quad K^+ \overline{K}^*(892)^0$		(3.3 ± 0.5) %		682
$\quad K^+ K^- \pi^+$ nonresonant		$(8.7 \pm 3.2) \times 10^{-3}$		805
$K^0 \overline{K}^0 \pi^+$				802
$\quad K^*(892)^+ \overline{K}^0$		(4.2 ± 1.0) %		683
$K^+ K^- \pi^+ \pi^0$				748
$\quad \phi \pi^+ \pi^0$		(8 ± 4) %		687
$\quad\quad \phi \rho^+$		$(6.5\ {}^{+1.6}_{-1.8})$ %		407
$\quad\quad \phi \pi^+ \pi^0$ 3-body		< 2.5 %	CL=90%	687
$\quad K^+ K^- \pi^+ \pi^0$ non-ϕ		< 8 %	CL=90%	748
$K^+ \overline{K}^0 \pi^+ \pi^-$		< 2.7 %	CL=90%	744
$K^0 K^- \pi^+ \pi^+$		(4.2 ± 1.1) %		744
$\quad K^*(892)^+ \overline{K}^*(892)^0$		(5.6 ± 2.1) %		412
$\quad K^0 K^- \pi^+ \pi^+$ non-$K^{*+} \overline{K}^{*0}$		< 2.8 %	CL=90%	744
$K^+ K^- \pi^+ \pi^+ \pi^-$				673
$\quad \phi \pi^+ \pi^+ \pi^-$		(1.8 ± 0.5) %		640
$\quad K^+ K^- \pi^+ \pi^+ \pi^-$ non-ϕ		$(3.0\ {}^{+3.0}_{-2.0}) \times 10^{-3}$		673