$\chi_{c2}(1P)$ or $\chi_{c2}(3555)$

$I^G(J^{PC}) = 0^+(2^{++})$

Mass $m = 3556.17 \pm 0.13$ MeV
Full width $\Gamma = 2.00 \pm 0.18$ MeV

$\chi_{c2}(1P)$ DECAY MODES	Fraction (Γ_i/Γ)	Confidence level	p (MeV/c)
Hadronic decays			
$2(\pi^+\pi^-)$	(2.2 ± 0.5) %		1751
$\pi^+\pi^- K^+ K^-$	(1.9 ± 0.5) %		1656
$3(\pi^+\pi^-)$	(1.2 ± 0.8) %		1707
$\rho^0\pi^+\pi^-$	$(7 \pm 4) \times 10^{-3}$		1683
$K^+\overline{K}^*(892)^0\pi^- +$ c.c.	$(4.8 \pm 2.8) \times 10^{-3}$		1601
$\pi^+\pi^- p\overline{p}$	$(3.3 \pm 1.3) \times 10^{-3}$		1410
$\pi^+\pi^-$	$(1.9 \pm 1.0) \times 10^{-3}$		1773
K^+K^-	$(1.5 \pm 1.1) \times 10^{-3}$		1708
$p\overline{p}$	$(10.0 \pm 1.0) \times 10^{-5}$		1510
$\pi^0\pi^0$	$(1.10 \pm 0.28) \times 10^{-3}$		1773
$\eta\eta$	$(8 \pm 5) \times 10^{-4}$		1692
$J/\psi(1S)\pi^+\pi^-\pi^0$	< 1.5 %	90%	185
Radiative decays			
$\gamma J/\psi(1S)$	(13.5 ± 1.1) %		430
$\gamma\gamma$	$(1.6 \pm 0.5) \times 10^{-4}$		1778

$\psi(2S)$ or $\psi(3685)$

$I^G(J^{PC}) = 0^-(1^{--})$

Mass $m = 3686.00 \pm 0.09$ MeV
Full width $\Gamma = 277 \pm 31$ keV (S = 1.1)
$\Gamma_{ee} = 2.14 \pm 0.21$ keV (Assuming $\Gamma_{ee} = \Gamma_{\mu\mu}$)