NODE=M188

$\rho(1570)$

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

OMITTED FROM SUMMARY TABLE

May be an OZI-violating decay mode of $\rho(1700)$. See our review in $\rho(1700)$ section. NODE=M188

$\rho(1570)$ MASS

NODE=M188205

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*	
NODE=M188M						
1570±36±62	54	[1] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$	
• • • We do not use the following data for averages, fits, limits, etc. • • •						
1480±40		[2] BITYUKOV	87	SPEC	32.5 $\pi^- p \to \phi\pi^0 n$	

[1] From the fit with two resonances. NODE=M188M;LINKAGE=AU

[2] Systematic errors not estimated. NODE=M188M;LINKAGE=BI

$\rho(1570)$ WIDTH

NODE=M188210

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*	
NODE=M188W						
144±75±43	54	[3] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$	
• • • We do not use the following data for averages, fits, limits, etc. • • •						
130±60		[4] BITYUKOV	87	SPEC	32.5 $\pi^- p \to \phi\pi^0 n$	

[3] From the fit with two resonances. NODE=M188W;LINKAGE=AU

[4] Systematic errors not estimated. NODE=M188W;LINKAGE=BI

$\rho(1570)$ DECAY MODES

NODE=M188215;NODE=M188

	Mode	Fraction (Γ_i/Γ)	
Γ_1	e^+e^-		DESIG=1
Γ_2	$\phi\pi$	not seen	DESIG=2
Γ_3	$\omega\pi$		DESIG=3

$\rho(1570)$ $\Gamma(i)\Gamma(e^+e^-)/\Gamma(total)$

NODE=M188225

$\Gamma(\phi\pi) \times \Gamma(e^+e^-)/\Gamma_{total}$ $\Gamma_2\Gamma_1/\Gamma$

NODE=M188G01

VALUE (eV)	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*	
NODE=M188G01							
3.5±0.9±0.3		54	[5] AUBERT	08S	BABR	10.6 $e^+e^- \to \phi\pi^0\gamma$	
• • • We do not use the following data for averages, fits, limits, etc. • • •							
<70	90		[6] AULCHENKO	87B	ND	$e^+e^- \to K^0_S K^0_L \pi^0$	

[5] From the fit with two resonances. NODE=M188G01;LINKAGE=AU

[6] Using mass and width of BITYUKOV 87. NODE=M188G01;LINKAGE=AL

$\rho(1570)$ BRANCHING RATIOS

NODE=M188220

$\Gamma(\phi\pi)/\Gamma_{total}$ Γ_2/Γ

NODE=M188R01

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*	
NODE=M188R01					
not seen	ABELE	97H	CBAR	$\overline{p}p \to K^0_L K^0_S \pi^0 \pi^0$	
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<0.01	[7] DONNACHIE	91	RVUE		

[7] Using data from BISELLO 91B, DOLINSKY 86, and ALBRECHT 87L. NODE=M188R01;LINKAGE=DO

$\Gamma(\phi\pi)/\Gamma(\omega\pi)$ Γ_2/Γ_3

NODE=M188R02

VALUE	*CL%*	*DOCUMENT ID*		*TECN*	*COMMENT*	
NODE=M188R02						
• • • We do not use the following data for averages, fits, limits, etc. • • •						
>0.5	95	BITYUKOV	87	SPEC	32.5 $\pi^- p \to \phi\pi^0 n$	

$\rho(1570)$ REFERENCES

NODE=M188

AUBERT	08S	PR D77 092002	B. Aubert *et al.*	(BABAR Collab.)	REFID=52242
ABELE	97H	PL B415 280	A. Abele *et al.*	(Crystal Barrel Collab.)	REFID=45765
BISELLO	91B	NPBPS B21 111	D. Bisello	(DM2 Collab.)	REFID=41752
DONNACHIE	91	ZPHY C51 689	A. Donnachie, A.B. Clegg	(MCHS, LANC)	REFID=41632
ALBRECHT	87L	PL B185 223	H. Albrecht *et al.*	(ARGUS Collab.)	REFID=40418
AULCHENKO	87B	JETPL 45 145	V.M. Aulchenko *et al.*	(NOVO)	REFID=41373
		Translated from ZETFP 45 118.			
BITYUKOV	87	PL B188 383	S.I. Bityukov *et al.*	(SERP)	REFID=40011
DOLINSKY	86	PL B174 453	S.I. Dolinsky *et al.*	(NOVO)	REFID=20246