

# Positron Partial Program Summary

Experiment		Measurement Configuration			Beam Parameters				Time (d)	PAC Grade
Label (EPJ A)	Short Name	Hall	Detector	Target	Polarity	$p$ (GeV/c)	$P$ (%)	$I$ ( $\mu$ A)		
<b><i>Two Photon Exchange Physics</i></b>										
57:144	H( $e, e'p$ )	B	CLAS12 <sup>+</sup>	H <sub>2</sub>	+/- <sub>s</sub>	2.2/3.3/4.4/6.6	0	0.060	53	
57:188	H( $\vec{e}, e'\vec{p}$ )	A	ECAL/SBS	H <sub>2</sub>	+/- <sub>p</sub>	2.2/4.4	60	0.200	121	
57:199	$r_p$	B	PRad-II	H <sub>2</sub>	+	0.7/1.4/2.1	0	0.070	40	
	$r_d$			D <sub>2</sub>		1.1/2.2		0.010	39	
57:213	$\vec{H}(e, e'p)$	A	BB/SBS	N $\vec{H}_3$	+/- <sub>s</sub>	2.2/4.4/6.6	0	0.100	20	
57:290	H( $e, e'p$ )	A	HRS/BB/SBS	H <sub>2</sub>	+/- <sub>s</sub>	2.2/4.4	0	1.000	14	
57:319	SupRos	A	HRS	H <sub>2</sub>	+/- <sub>p</sub>	0.6–11.0	0	2.000	35	
58:36	A( $e, e'$ )A	A	HRS	He	+/- <sub>p</sub>	2.2	0	1.000	38	
<b><i>Nuclear Structure Physics</i></b>										
57:186	p-DVCS	B	CLAS12	H <sub>2</sub>	+/- <sub>s</sub>	2.2/10.6	60	0.045	100	C2
57:226	n-DVCS	B	CLAS12	D <sub>2</sub>	+/- <sub>s</sub>	11.0	60	0.060	80	
57:240	p-DDVCS	A	SoLID <sup><math>\mu</math></sup>	H <sub>2</sub>	+/- <sub>s</sub>	11.0	30	3.000	100	
57:300	p-DVCS	C	SHMS/NPS	H <sub>2</sub>	+	6.6/8.8/11.0	0	5.000	77	C2
<b><i>Beyond the Standard Model Physics</i></b>										
57:173	C <sub>3q</sub>	A	SoLID	D <sub>2</sub>	+/- <sub>s</sub>	6.6/11.0	(30)	3.000	104	D
57:253	LDM	B	PADME	C	+	11.0	0	0.100	180	
			ECAL/HCAL	PbW <sub>04</sub>					120	

CLAS12<sup>+</sup>  $\equiv$  CLAS12 implemented with an Electromagnetic Calorimeter in the Central Detector

SoLID <sup>$\mu$</sup>   $\equiv$  SoLID complemented with a muon detector

+ Secondary positron beam

-<sub>s</sub> Secondary electron beam

-<sub>p</sub> Primary electron beam

Experiment		Configuration			
Label (EPJ A)	Short Name	Hall	Detector	$P$	
<b><i>Nuclear Structure Physics</i></b>					
57:273	He-DVCS	B	CLAS12/ALERT	×	
57:311	DIS	A/C	HRS/HMS/SHMS	×	
57:316	VCS	A	HRS	×	
<b><i>Beyond the Standard Model Physics</i></b>					
57:315	CLFV	A	SoLID <sup><math>\mu</math></sup>	–	

**Nuclear Structure and Beyond the Standard Model Physics  
would take advantage of higher beam energies.**