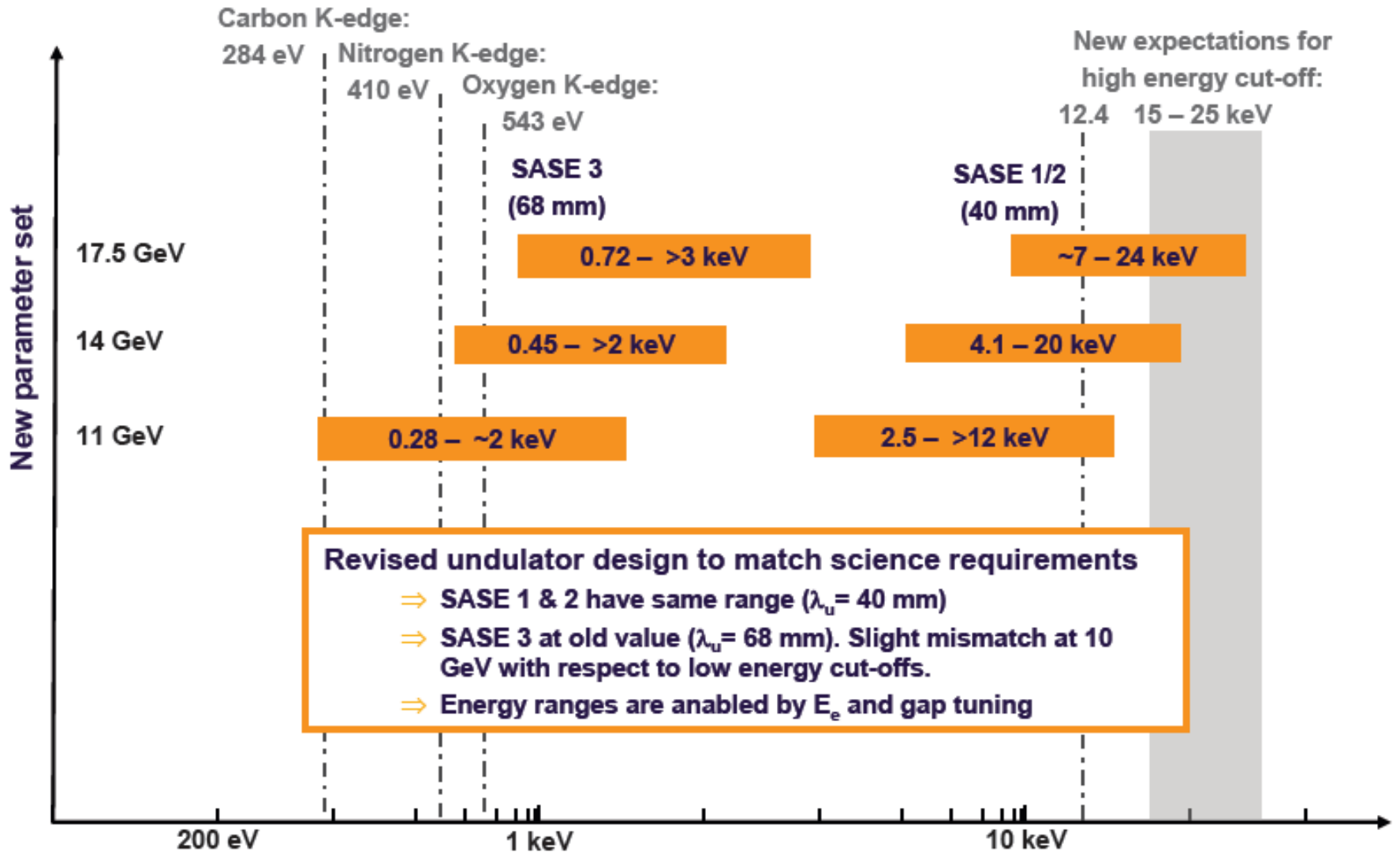


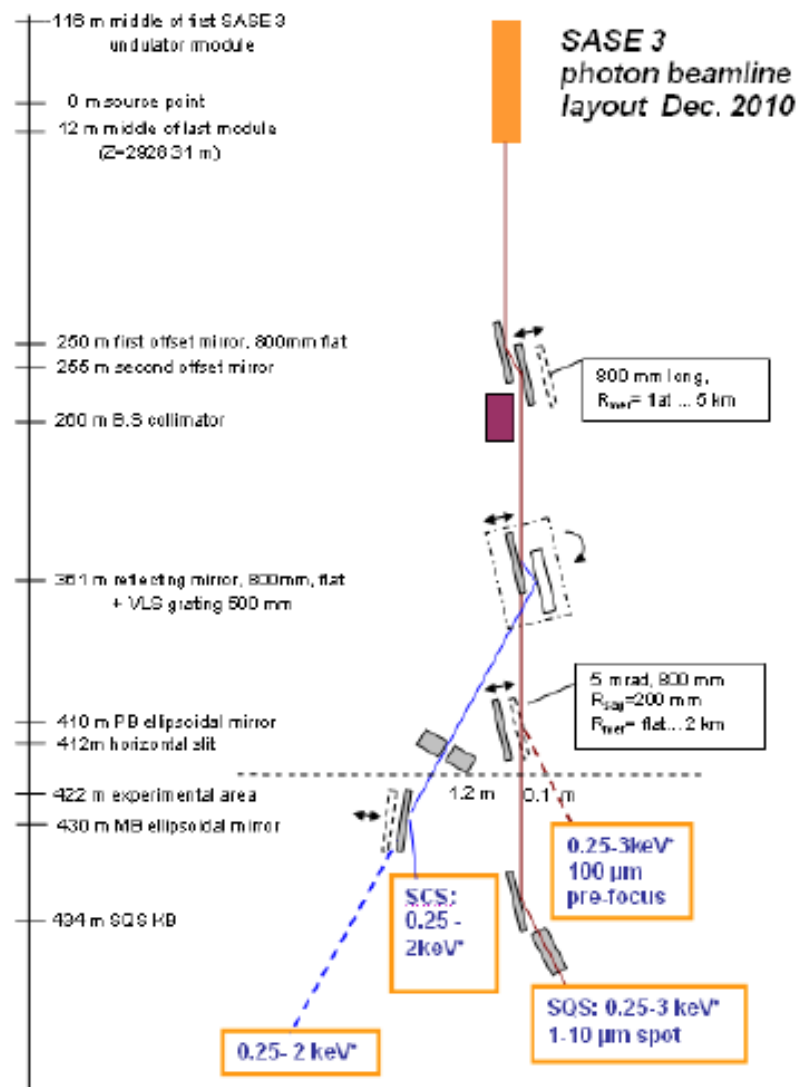
SCS and SQS Parameters

SCS and SQS Summary



Instruments

- SQS (pink branch)
 - 0.5 – 3 keV (optimized)
 - 0.25 – 0.5 keV (reduced)
 - 1 – 10 μm (KB; 1st port)
 - 100 μm (pre-focus; 2nd port)
- SCS (mono branch)
 - 0.5 – 2 keV (optimized)
 - 0.25 – 0.5 keV (reduced)
 - 10-20 μm (ellipsoidal mirror)
 - few mm (unfocused; 2nd port)



Photon beam parameters (SCS)

Parameter	SCS	SCS (bio)	Units
Energy Range	250-2000	250-3000	eV
Monochromaticity	$1-3 \times 10^4$	Nat., up to 1×10^4	$E/\Delta E$
Polarization	Arbitrary (circular, linear)		
Pulse duration	1-1000	<10	fs
Focus	1-100	0.1-10	μm
Flux (per pulse)	$1 \times 10^6 - 1 \times 10^{10}$	Min 1×10^{12}	
Split/delay	yes		

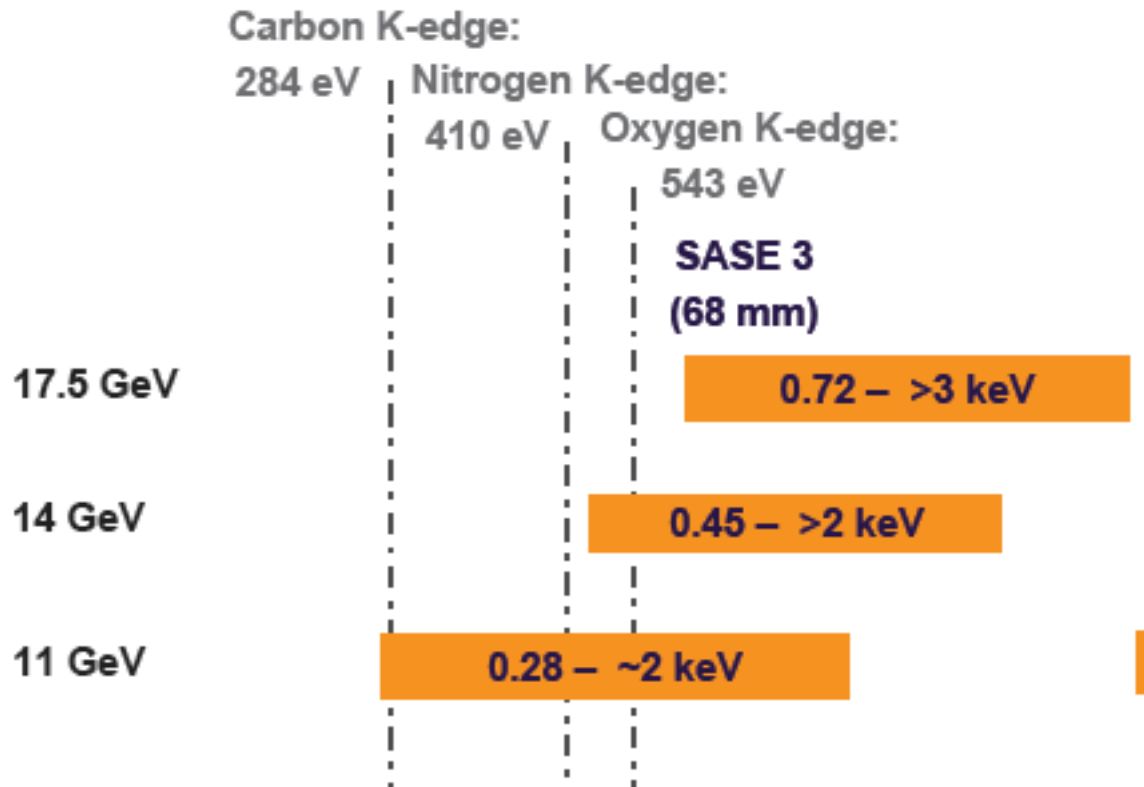
Photon beam parameters (SCS)

Parameter	SCS III	Units
Energy Range	450-2000	eV
Monochromaticity	Pink, 1×10^4	$E/\Delta E$
Polarization	Arbitrary (circular, linear)	
Pulse duration	To below 10	fs
Focus	5-300	μm
Flux (per pulse)	$0.13-7 \times 10^{13}$	
Split/delay	yes	

Photon beam parameters (SQS)

Parameter	SQS	Units
Energy Range	250-3000	eV
Monochromaticity	$1-3 \times 10^4$	$E/\Delta E$
Polarization	Arbitrary (circular, linear)	
Pulse duration	10-80	fs
Focus	1-10	μm
Flux (per pulse)	$0.13-7 \times 10^{13}$	
Split/delay	yes	

SCS and SQS Summary



SASE 3: beam 1

0.25-1.2 keV

SASE 3: beam 2

0.5-3.0 keV