

ID	Adonis RA	Task Name	Current Finish	2018		2019		2020		2021		2022		2023		2024		2025		2026	
				H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2	H1	H2
3	DUHA RA1	M1. Physical layout, optical model, and SHG and OPCPA simulations completed; required GDD for broadband pulse specified	Mon 31.12.18																		
4	DUHA RA1	M2. SHG of pump laser demonstrated at 20Hz;	Fri 30.09.22																		
5	DUHA RA1	M3. Offner stretcher installed and broadband seed stretched at full energy	Tue 31.08.21																		
6	DUHA RA1	M4. OPCPA amplification demonstrated to >1J, 20Hz; and with expandability to 50 Hz via supply of helium cryogenic system with increased (>1kW) cooling	Wed 30.11.22																		
7	DUHA RA1	M5. Compressor installed and tested with full OPCPA output with compression to < 30 fs (Full System completion)	Sat 31.12.22																		
8	DUHA RA1	M6. Installation of Beam transport system between L2 and hall E5	Fri 31.03.23																		
10	DUHA RA2	M7. Demonstration of >10nJ laser pulses centered above 2.0µm with a spectrum supporting <40fs pulses at a repetition rate of 1kHz or higher.	Tue 31.03.20																		
11	DUHA RA2	M8. >1mJ output from mid-IR OPCPA at 1kHz	Mon 31.05.21																		
12	DUHA RA2	M9. Compression of full OPCPA output energy to <50fs, CEP stable	Thu 30.09.21																		
13	DUHA RA2	M10. Full technical design report for 100TW, mid-IR laser system including design of stretcher, OPCPA, and compressor	Sat 30.04.22																		
16	F-SYNC RA1	M1. Functionality of „Coarse/slow“ feedback loop verified to stabilize uncompressed output to <100 fs rms relative to the oscillator output or rf reference (on L1.1)	Tue 30.04.19																		
17	F-SYNC RA1	M2. Functionality of „fine/fast“ feedback loop verified to stabilize compressed output to <5 fs rms relative to the oscillator output (on L1.1)	Wed 30.09.20																		
18	F-SYNC RA1	M3. L1.2 Booster amplifier operation at > 12 mJ /1 kHz	Wed 30.06.21																		
19	F-SYNC RA1	M4. Beam transport for L1.2, vacuum chirped mirror compressor and beam injector (interface with E1 experimental hall) installed	Sat 31.12.22																		
20	F-SYNC RA1	M5. L1.1 and L1.2 outputs synchronized to <20 fs relative to each other for any delay	Tue 31.05.22																		
22	F-SYNC RA2	M6. Demonstration of coherent combination of two beams with combined energy > 1mJ with efficiency >90%	Fri 31.01.20																		
23	F-SYNC RA2	M7. Demonstration of coherent combination of L1.1 and L1.2 booster outputs seeded from single oscillator with combined energy > 20mJ (average power >20W) with efficiency >90%	Fri 30.09.22																		
26	FLIP RA1	M1.1 Test report from existing prototype telescope	Thu 28.02.19																		
27	FLIP RA1	M1.2 Technical Design Report of the telescope system	Wed 31.07.19																		
29	FLIP RA2	M2.1 Conceptual design report	Fri 31.05.19																		
30	FLIP RA2	M2.2 Technical design report for the spatial diagnostic system including the de-magnifying telescope	Sun 31.01.21																		
31	FLIP RA2	M2.3 Acceptance of CIS optics	Mon 31.08.20																		
32	FLIP RA2	M2.4 Commissioning of telescopic systems	Fri 30.06.23																		
35	FLAX Gammatron	M1. Demonstration of a femtosecond broadband X-ray source based on transversal motion of electrons inside the cavity during the acceleration	Thu 31.03.22																		
36	FLAX Gammatron	M2. Demonstration of high-repetition rate operation of the broadband Gammatron source	Sat 31.12.22																		
37	FLAX Gammatron	M3. Demonstration of the quasimonochromatic mode of the Gammatron beamline	Fri 30.09.22																		
38	FLAX Gammatron	M4. Performance of the VIS/X-ray pump-probe experiment proving the short pulse duration of the source	Sun 30.04.23																		
39	FLAX Gammatron	M5. Demonstration of 10 Hz operation of the broadband Gammatron source	Fri 30.06.28																		
41	FLAX HHG	M6. HHG with two color driving scheme	Thu 31.12.20																		
42	FLAX HHG	M7. Employment of the quasi-phase matching scheme for HHG	Fri 31.12.21																		
43	FLAX HHG	M8. Demonstration of the circularly polarized HHG beam	Wed 30.06.21																		
44	FLAX HHG	M9. Post-compression of the HHG driving laser pulse	Wed 30.11.22																		
47	LUIS RA	M1. Characterize the laser-driven plasma with precision and repeatability.	Thu 30.06.22																		
48	LUIS RA	M2. Reach stable and acceleration of electron beams.	Sat 31.12.22																		
49	LUIS RA	M3. EUV FEL driver commissioned.	Fri 30.06.23																		
52	IAL RA	M1. Implementation of multi-laser beam setup into the ELIMAIA target chamber.	Fri 30.06.23																		
53	IAL RA	M2. Generation of proton/ion beams with innovative features (e.g. improved energy, charge, divergence) using L4p.	Fri 30.06.23																		
56	EAL (ELBA) RA	M1. Implementation of the Laser-Electron collider scheme into the HELL platform.	Fri 30.06.23																		
57	EAL (ELBA) RA	M2. Generation of electron beams and counter-propagation scheme with L3 and/or L4p in the HELL platform.	Fri 30.06.23																		
60	MBMS AMO & CDI	M1.1 MAC chamber upgrades commissioned for AMO and CDI experiments.	Thu 01.07.21																		
61	MBMS AMO & CDI	M1.2 Perform THz/VUV photoelectron streaking experiments on aerosol samples.	Sat 31.12.22																		
63	MBMS Soft X-ray	M2.1 ELIps upgrades implemented and commissioned.	Sun 01.03.20																		
64	MBMS Soft X-ray	M2.2 Time-resolved spectroscopic ellipsometry on intrinsic (un doped) and extrinsic (doped) semiconductors performed with a time resolution better than 300 fs.	Tue 01.09.20																		
66	MBMS TREX	M3.1 TREX upgrades implemented and commissioned.	Thu 31.12.20																		
67	MBMS TREX	M3.2 Pulse shaped pump/X-ray diffraction probe time-resolved crystallography performed	Thu 30.06.22																		
69	MBMS SRS	M4.1 Development of a station for transient absorption spectroscopy with ultra broadband probe regime from 200 nm to 2 microns.	Mon 01.04.19																		
70	MBMS SRS	M4.2 Development of a station for femtosecond stimulated Raman spectroscopy both in frequency and time domain.	Wed 01.04.20																		
71	MBMS SRS	M4.3 Development of station for transient mid-IR spectroscopy.	Sun 01.09.19																		
74	Hi2LMI RA	M1. Creating a research group RP Hi2LMI	Thu 31.12.20																		
75	Hi2LMI RA	M2. Large vacuum infrastructure operational	Sat 31.12.22																		
76	Hi2LMI RA	M3. HPC upgrade and infrastructure operational	Tue 31.03.20																		
77	Hi2LMI RA	M4. Commissioning of transport and focusing optics for 10 PW	Fri 30.06.23																		
78	Hi2LMI RA	M5. MOB operational	Fri 31.03.23																		
79	Hi2LMI RA	M6.1 L4n beam transport commissioned	Mon 31.01.22																		
80	Hi2LMI RA	M6.2 Beam transport L4p commissioned	Fri 30.06.23																		
81	Hi2LMI RA	M7. High-rep rate targetry & alignment system operational	Tue 31.12.19																		
82	Hi2LMI RA	M8. Long focal-length setup operational	Tue 31.12.19																		

Green colour = Fulfilled milestones Orange colour = ISAC
Red colour = Milestones in 2021 Black colour = Milestones in 2022 -...