

# Pump-Probe Laser 2030+

28.01.2026 / 09:00 – 17:00

*Hybrid Meeting (in-person and Zoom), EuXFEL XHQ E1.173*

Pump-probe (PP-) lasers, are vital for most time-resolved studies at the European XFEL. Since their installation in 2016, these lasers have operated successfully for seven instruments across three SASE beamlines and with over 95% uptime.

The EuXFEL strategy 2030+ includes plans for developments of future PP-lasers and secondary sources, such as attosecond pulses and new light sources in the THz and mid-infrared range.

In this workshop, we will present the 'Pump-probe lasers 2030+' program and discuss its planning status. We invite all EuXFEL instruments and external users to share their future needs for PP-lasers and secondary sources.

**Organisers:** M. Lederer, D. Rompotis, I. Radu, M. Emons, M. Robinson, M. Meyer

**Contact:** max.lederer@xfel.eu

## 28.01.2026, EuXFEL XHQ E1.173

<b>09:00</b>	Welcome	M. Lederer	LAS, EuXFEL
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<b>09:05</b>	Strategy Program SP006 "PPL2030+" (10' + 5')	M. Lederer	LAS, EuXFEL
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### Requirements and specs for future PPLs

<b>09:20</b>	Current PPL specs (10' + 5')	R. Secareanu	LAS, EuXFEL
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<b>09:35</b>	Instruments survey: future PPL needs (5' + 5')	M. Lederer	LAS, EuXFEL
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<b>09:45</b>	Technology survey: high power laser amps (5' + 5')	M. Lederer	LAS, EuXFEL
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<b>09:55</b>	Future machine operation modes (15'+5')	H. Sinn	DoI, EuXFEL
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### 10:15 Coffee break and poster session

<b>10:45</b>	6 user / instr. presentations concerning current / future PPL requirements (10'+5'), ad hoc brainstorming	t.b.d.	t.b.d.
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### 12:15 Lunch (individual)

### SP006 and other planned activities

<b>13:00</b>	Possible future laser designs (20'+10')	D. Walke	LAS, EuXFEL
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<b>13:30</b>	Laser based THz implementation plans (20'+10')	I. Radu	LAS, EuXFEL
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<b>14:00</b>	Few-fs / sub-fs UV/Vis pulses: "EXTRA" (20'+10')	M. Robinson	SQS, EuXFEL
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<b>14:30</b>	Secondary sources (20'+10')	D. Rompotis, M. Emons	LAS, EuXFEL
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### 15:00 Coffee break and poster session

<b>15:30</b>	Synchronization plans (LAM, etc.) (20'+10')	S. Schulz	LbSync, DESY
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<b>16:00</b>	Final discussions, collecting input from instr. and users	M. Lederer	LAS, EuXFEL
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<b>17:00</b>	Close	M. Lederer	LAS, EuXFEL
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### 18:00 Dinner at BeamStop