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Photocathode Laser based on a 3 GHz Electro-Optical Comb Generator for the Ultrafast Electron Diffraction Facility REGAE

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We present a photocathode laser generating a train of 1030 nm, picosecond pulses with a repetition rate of 3 GHz, which is converted to 257 nm by two stages of second harmonic generation. The system is able to generate bursts of microsecond duration for the application of ultrafast electron diffraction.

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