Contribution ID: 121 Type: Oral

Spatially-multiplexed tunable dual-comb optical parametric oscillator at 250 MHz

Friday, 2 September 2022 08:15 (15 minutes)

We demonstrate a spatially-multiplexed dual-comb 250-MHz OPO from a single linear cavity. The adjustable repetition-rate difference is 4.1 kHz. Each idler comb has >200 mW average power at 3.5 \boxtimes m with 30 nm bandwidth. The OPO is wavelength-tunable from 1.36 μ m to 1.7 μ m and 2.9 μ m to 4.17 μ m.

Primary authors: BAUER, Carolin P. (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland); PU-PEIKIS, Justinas (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland); WILLENBERG, Benjamin (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland); BEJM, Zofia A. (Institute of Quantum Electronics, ETH Zurich, Switzerland); PEZZOLI, Noè (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland); PHILLIPS, Christopher R. (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland); KELLER, Ursula (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland)

Presenter: BAUER, Carolin P. (Institute of Quantum Electronics, ETH Zurich, Zurich, Switzerland)

Session Classification: SSL 6 Piskarskas memorial