Single-frequency praseodymium doped YLF laser design and operation with extended wavelength coverage in the visible

Thursday, 1 September 2022 15:45 (15 minutes)

Single-frequency operation of a diode-pumped praseodymium-doped YLF laser has been demonstrated using an elegant cavity design. Over 100 mW of single-frequency operation has been achieved from 687 nm to 705 nm with one cavity arrangement. This laser system targets use in neutral strontium optical clocks.

Primary authors: WHITE, Paul (Fraunhofer Centre for Applied Phootnics, Glasgow, United Kingdom); KEMP, Alan (University of Strathclyde, Glasgow, United Kingdom); MCKNIGHT, Loyd (Fraunhofer Centre for Applied Phootnics, Glasgow, United Kingdom)

Presenter: WHITE, Paul (Fraunhofer Centre for Applied Phootnics, Glasgow, United Kingdom)

Session Classification: SSL 5 Spectral control and tuning