## Experimental and numerical study of a 1.94-µm monolithic single-oscillator thulium-doped fiber laser in continuous-wave regime

Thursday, 1 September 2022 12:00 (2 hours)

A continuous-wave all-fibered single-oscillator thulium-doped fiber laser is developed. Taking advantage of a high absorption at 793 nm (8.42 dB/m), the source exhibits 260 W of maximum output power at 1.94  $\mu$ m and a slope efficiency of 59 %. Rate equations are applied to numerically study the cavity.

code

**Primary authors:** SANSON, Félix (French-german research Institute of Saint-Louis, Saint-Louis, France); LOUOT, Christophe (French-german research Institute of Saint-Louis, Saint-Louis, France); MANEK-HÖNNINGER, Inka (Université de Bordeaux, CNRS CEA, CELIA UMR5107, Bordeaux, France); HILDENBRAND-DHOLLANDE, Anne (French-german research Institute of Saint-Louis, Saint-Louis, France)

Presenter: SANSON, Félix (French-german research Institute of Saint-Louis, Saint-Louis, France)

Session Classification: Lunch and Poster Session 2