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Digital laser mode amplification using ND: YAG amplifier

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Abstract content (Max 300 words) **Formatting & Special chars**

In this we work demonstrate the output power amplification of the generated higher-order modes from a digital laser by using an extra-cavity Nd: YAG amplifier. The digital laser generates fundamental higher-order modes by encoding and displaying amplitude digital hologram mask on a phase-only spatial light modulator (SLM) that acts as an end-mirror of the laser resonator cavity. The amplifier was designed in such a manner that when higher-order modes enters the Nd:YAG amplifier they will experience higher gain which would translate to increase the power of the mode when it is transmitted through the amplifier.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

PhD

Main supervisor (name and email) and his / her institution

Andrew Forbes

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Yes

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Yes

Primary author: Mr BELL, Teboho (CSIR)

Co-authors: Prof. FORBES, Andrew (CSIR); Dr NGCOBO, Sandile (CSIR)

Presenter: Mr BELL, Teboho (CSIR)

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