

SAIP2013



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Tuneable Gaussian to Flat-top resonator by amplitude beam shaping

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Abstract :

We outline a simple laser cavity comprising an opaque ring and a circular aperture that is capable of producing spatially tuneable laser modes, from a Gaussian beam to a Flat-top beam. The tune-ability is achieved by varying the diameter of the aperture and thus requires no realignment of the cavity. We demonstrate this principle using a digital laser with an intra-cavity spatial light modulator, and confirm the properties of the resonator experimentally.

Award :

yes

Level :

PhD

Supervisor :

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Paper :

No

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