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Tuneable Gaussian to Flat-top resonator by amplitude beam shaping

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Abstract content
 (Max 300 words)

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.

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

yes

Level for award
 (Hons, MSc,
 PhD)?

PhD

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

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Would you like to
 submit a short paper
 for the Conference
 Pro-ceedings (Yes / No)?

No

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