

# SAIP2013



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## **Beam shaping with a laser amplifier**

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### **Abstract :**

We propose a new technique for laser beam shaping namely the reshaping of the laser beam into a desirable beam profile by the use of a laser amplifier with a pump beam that has a modified intensity profile. We developed the analytical formula which describes the transformation of the seed beam into the desired beam profile in the amplifiers small signal regime. In the case were high pump power saturated the laser crystal we have shown the method of reshaping of the seed beam into desirable beam by a numerically obtained pump intensity profile.

### **Award :**

No

### **Paper :**

No

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