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# External cavity segmented broad area laser diode system with good beam quality.

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Broad area laser diodes and diode laser bars are attractive laser sources due to their small size, high power and high efficiency. Their use is however limited by the poor beam quality in the slow axis. We will present results on the improvement of the beam quality for a segmented broad area laser. The beam quality of the laser is improved by a factor of 23 as compared to the freely running laser.

The setup combines off axis feedback with spectral beam combining in order to apply feedback to the individual segments of the laser. A few application examples are given.