

Diploma thesis abstract

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Spatial field distribution laser beam control by
means of electrically driven phase elements

In this work we present results of experimental formation of beams with vortex wave front dislocation by means of phase optical elements: spiral phase plate, bimorph adaptive mirror, controlled liquid crystal modulator. Also we have used liquid crystal modulator to form different intensity patterns in the far-field region. Gerchberg-Saxton algorithm has been implemented to determine required liquid crystal modulator phase.

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