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Surface plasmon lasers

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PROEFSCHRIFT

ter verkrijging van
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klokke 10.00 uur

door

Vasco Tomas Tenner

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Dr. ir. S. J. van der Molen
Prof. dr. J. M. van Ruitenbeek

COVER IMAGE

By Vasco Tenner and Dirk Boonzajer Flaes. It shows the intensity and phase of the laser beam emitted by a surface-plasmon laser operating in the B-mode of a hexagonal metal hole array at distances from the sample ranging from $1\ \mu\text{m}$ (left bottom) to $300\ \mu\text{m}$ (right top). The images are based on the intensity and phase measurements shown in Fig. 6.4 and propagated numerically to the desired distance with a Fresnel propagator. The colors encode the local phase of the $j = \pm 3$ component of the beam. Every image is scaled in order to create an esthetical ensemble.

The research reported in this thesis was conducted at the 'Leids Instituut voor Onderzoek in de Natuurkunde' (LION).

An electronic version of this dissertation is available at the Leiden University Repository (<https://openaccess.leidenuniv.nl>).

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The mountains are calling and I must go.

John Muir

Aan Rosalie

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