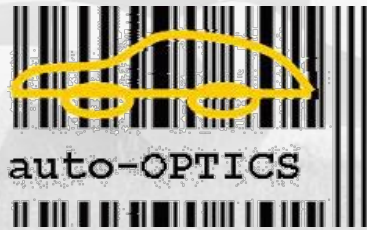




Photonics Research and Education at Harz University in Wernigerode

Dipl.-Wirtsch.-Inf.(FH) Christian Reinboth



Welcome to Harz University

- Harz University
 - Founded in '91
 - 3200 Students
- Research at HarzU
 - Photonics
 - Automation
 - Environment



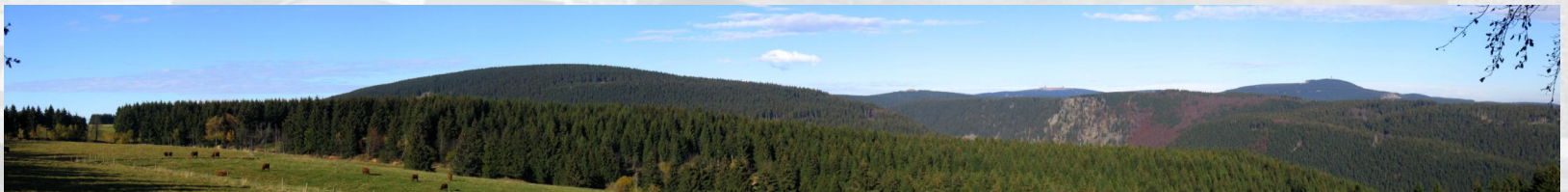
Wernigerode and the Harz



Brocken (1141m)



Wernigerode Castle

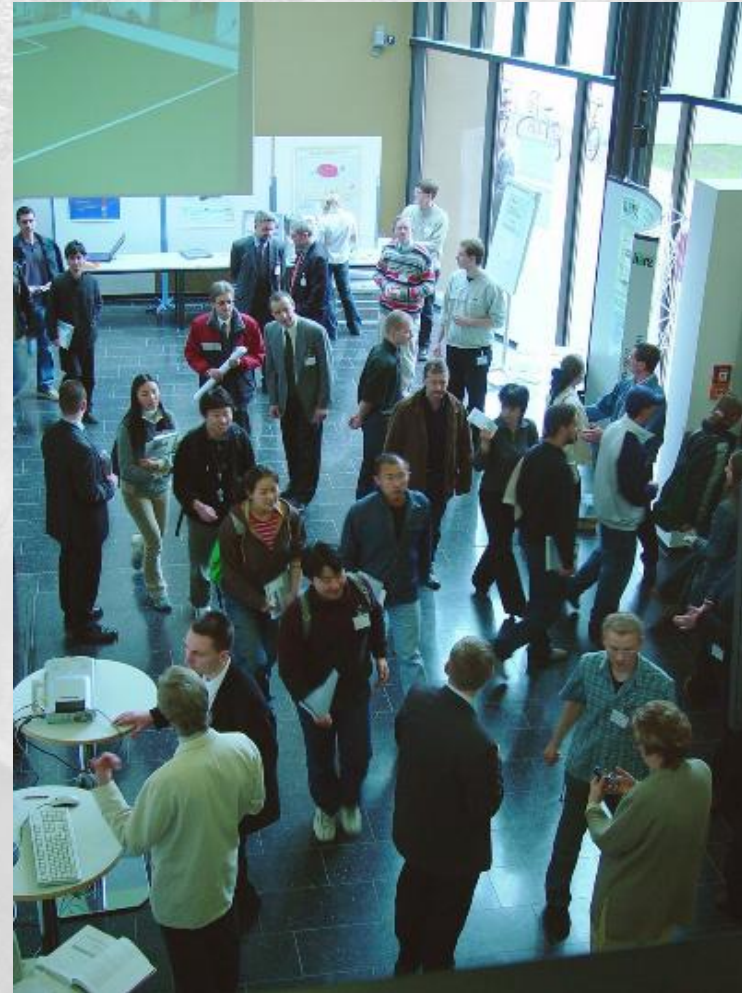


Campus Impressions



Studying at Harz University

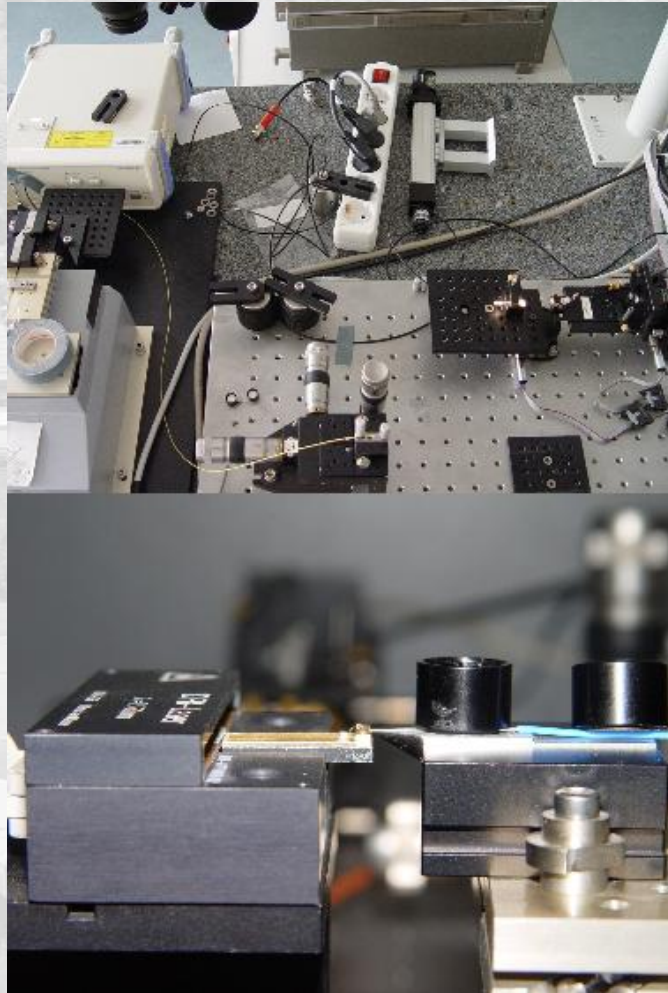
- Modern Education
 - Industry Instructors
 - Small Study Groups
 - International Contacts
 - Language Center
- Equipment
 - High-tech Laboratories
 - Campus-wide WLAN
 - Measurement Technology
- Study and work in a city other people visit only on vacation!



Labwork Impressions

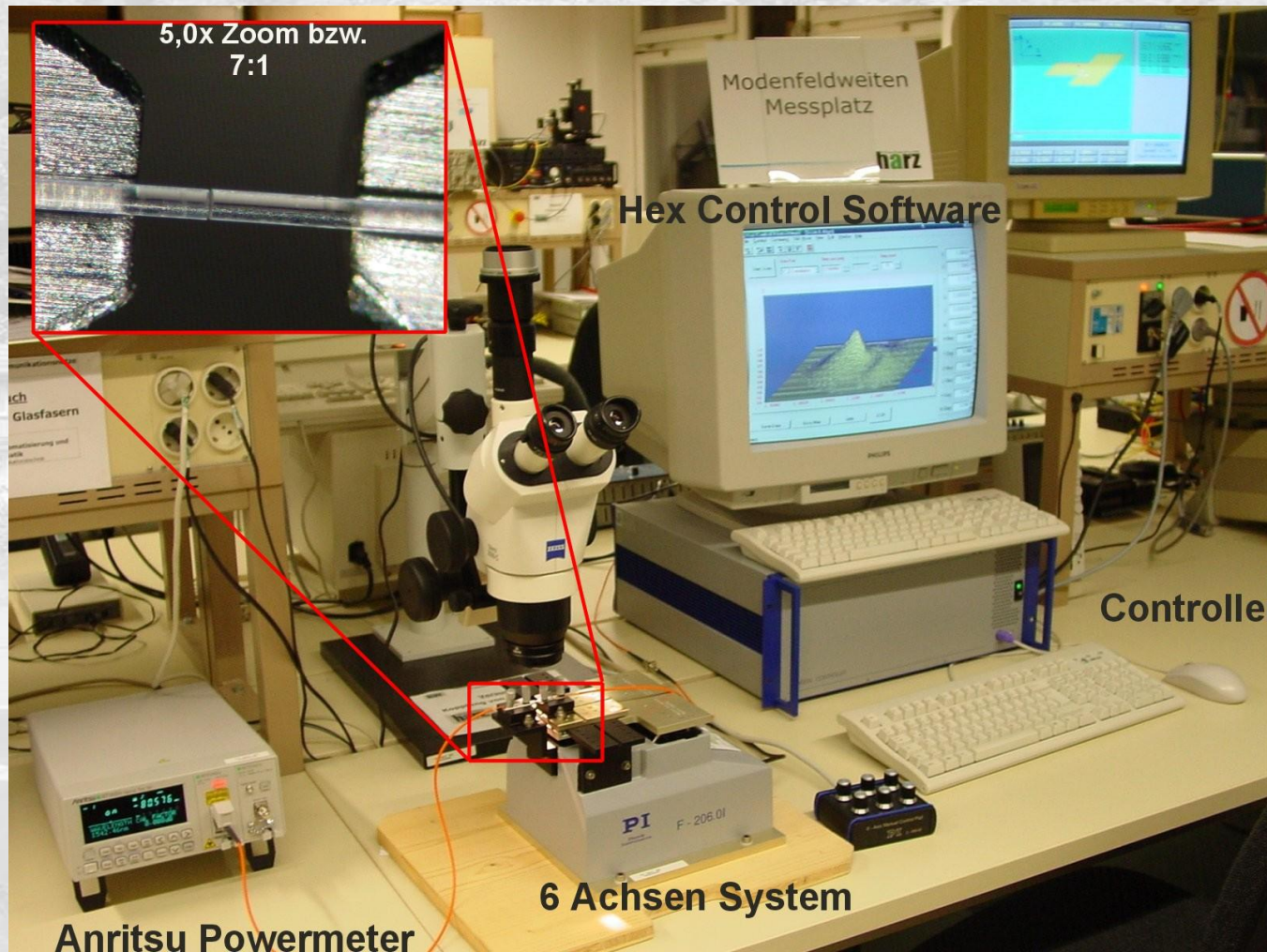


B.Eng. with Photonic Systems



- Education
 - Math, Physics, Electronics
 - Information Systems (C++)
 - Basic Economics, English
 - Microcomputer Technology
 - Design of Optical Components
- Application
 - Team Work Projects
 - Scientific Work Principles
 - Optical Networks, Ethernet
 - Bachelor Thesis (3 Months)

Measurement Technology



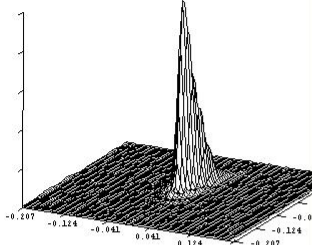
Optical Design with Software

OpTaliX-Pro Server 6.38 Z:\OpTaliX\Fischer Spiegel Linse 2.03.otx

File List Edit Display Geom.Analysis Diffr.Analysis Tools Optimization Glass Manager Coatings Manufacturing Windows Help

F wire grid plot

DIPRACTION POINT SPREAD FUNCTION File = Fischer Spiegel



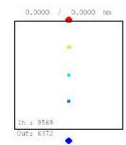
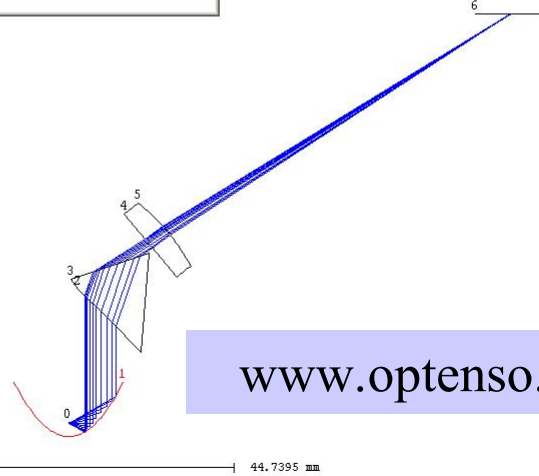
Surface Editor: Z:\OpTaliX\Fischer Spiegel Linse 2.03.otx

Standard Data	Decenter, Tilts	Asphere	GRIN	Solves	Special Apertures	Hologram	Misc.						
TYPE	Radius	Distance	GLASS	APE-Y	Shape	Gib	THR	Comment	Coating				
OBJ S	0.00000000	0.000000		0.04	circular	0	0.00000						
STO AMD	-4.00000000	6.000000		8.00	circular	0	0.00000						
2 SD	0.00000000	0.000000	POLYCARB	6.50	circular	0	0.00000						
3 SD	0.00000000	6.000000		6.00	circular	0	0.00000						
4 SD	0.00000000	2.500000	PMMA	6.00	circular	0	0.00000						
5 SD	-30.20000000	50.000000		6.00	circular	0	0.00000						
IMG SD	0.00000000	67.61873		5.00	circular	0	0.00000						

EFL = 2.690846 BFL = -17.61873 EPD = 1.154701 PIM
MAG = 1.288621 SYL = 14.50000 OAL = 64.50000 AFD

Pos: 1 Insert Surf. Insert File Delete Surf. Help Close

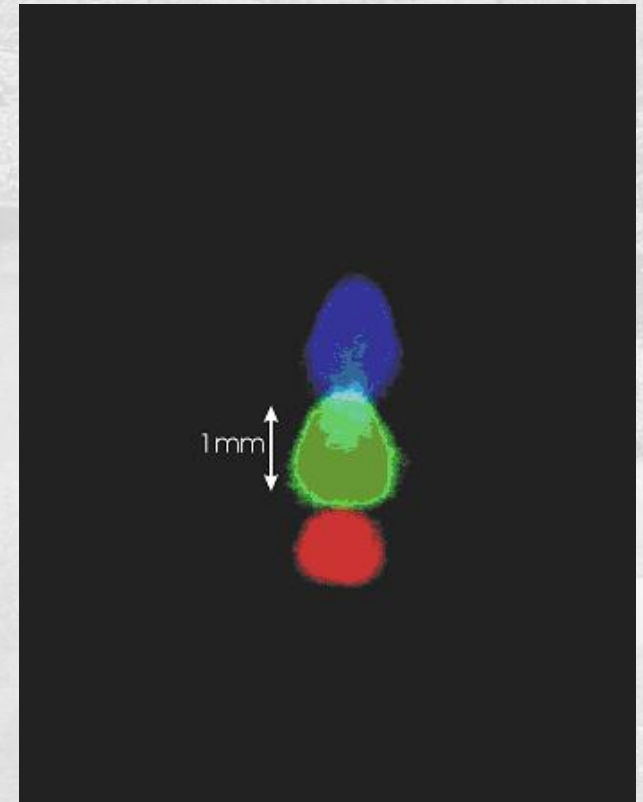
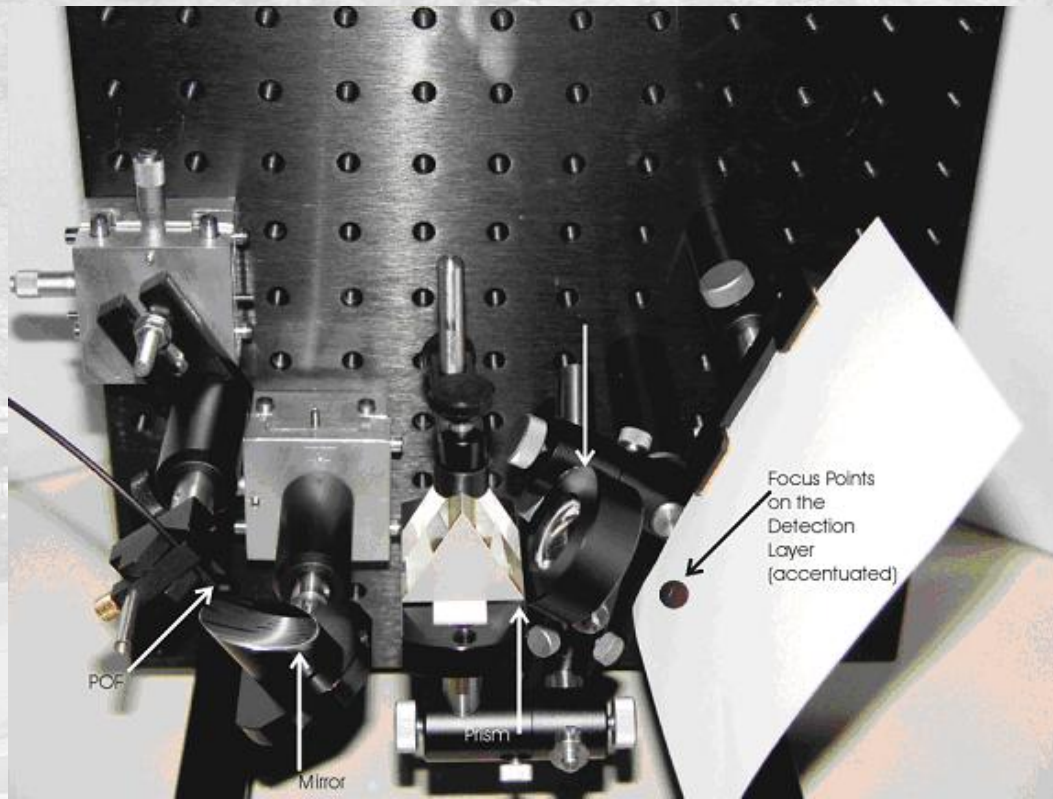
SPOT DIAGRAM File = Fischer Spiegel Linse 2.03.otx

www.optenso.de

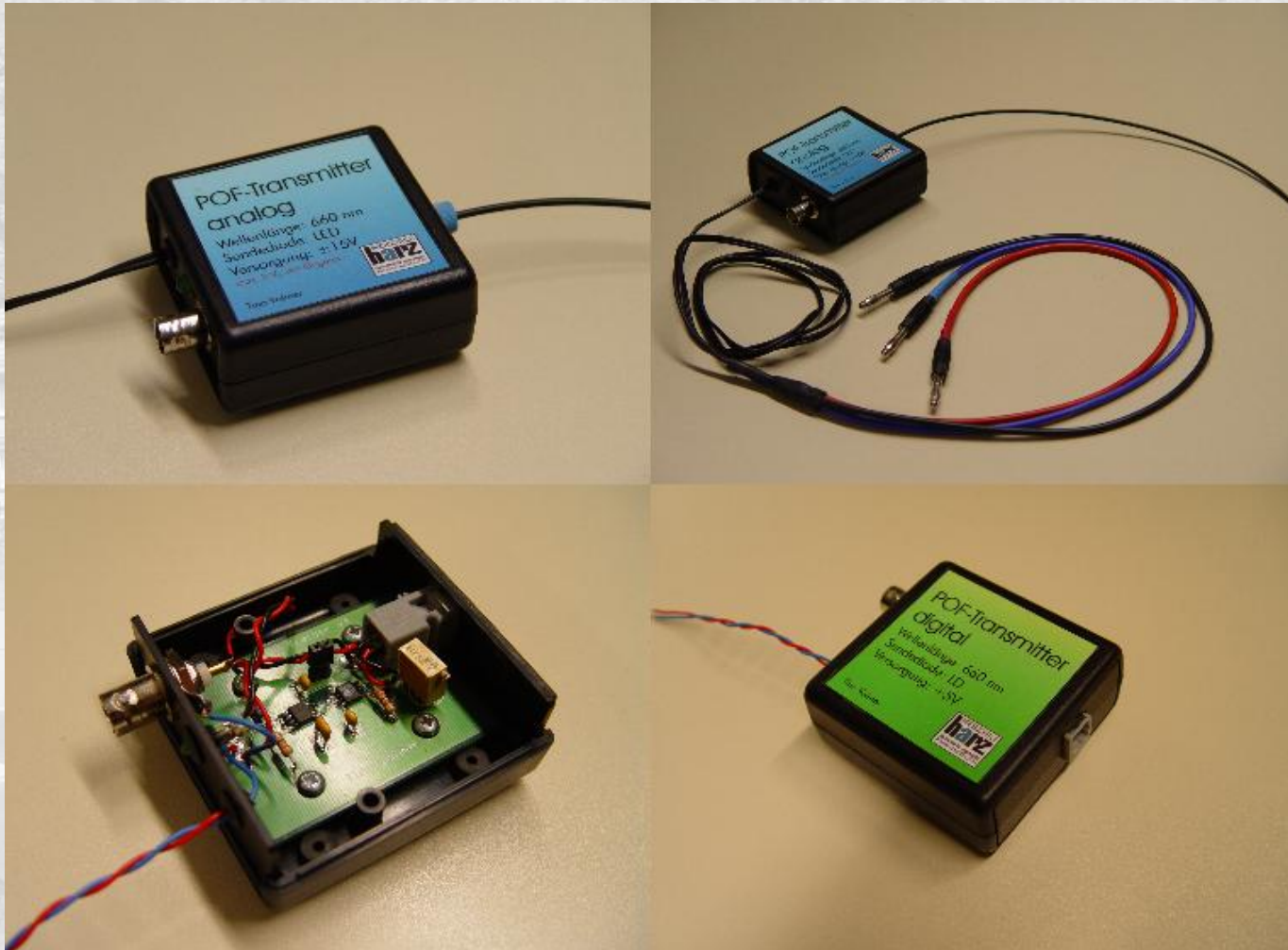
Grid: 64 | OUT: to screen | GRA: to screen | POS: 1/1 | Z:\OpTaliX\Fischer Spiegel Linse 2.03.otx

Prototype of Demultiplexer



3-Channel Optical Demultiplexer for POF Transmission Systems

Student-developed Technology



Our Research Partners



Photonic-Net



HOCHSCHULE
harz

Hochschule für angewandte
Wissenschaften (FH)

Wernigerode
Halberstadt
www.hs-harz.de



AutoOptics Course Programme

- 8:30 Shuttle from the Hotel „Weißer Hirsch“ to the campus of Harz University
- 9:00 Start of the First Workshop Session
- 11:00 Coffee Break (Catering will be provided)
- 11:30 Start of the Second Workshop Session
- 13:00 Luncheon at the University Cafeteria
- 14:00 Guided Tour of Harz University campus
- 14:30 Start of the Third Workshop Session
- 17:00 Shuttle form Harz University back to the Hotel „Weißer Hirsch“
- 17:30 Guided Tour of Wernigerode City
- 19:00 Medieval Dinner at the „Altes Amtshaus“ including a historical music programme





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Wissenschaften
Hauptgebäude