

Posters for the Report Seminar November 19th, 2004 ([click title to view](#))

	Title (preliminary)	CEA*
Finished Projects		
1	Optical and dielectric properties of $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ and LiTaO_3 crystals	David, Wöhlecke
2	Vectorial beam coupling in fast photorefractive crystals with AC-enhanced response	Filippov, Krätzig
3	On the theory of planar and cylindrical dielectric waveguides with photorefractive nonlinearities	Geisler, Schürmann
4	Nonlinear wave equations and solitons	Homann, Schmidt
5	Study of ferroelectric switching by domain-wall induced light scattering	Isakov, Wöhlecke, Betzler
6	Critical phenomena in optics	Kamenov, Ringhofer
7	Light-induced absorption changes in ferroelectric crystals	Kislova, Kapphan
8	Microwave interactions in nonlinear metamaterials	Lapine, Betzler
9	Interactions between light and ferroelectric domains in lithium niobate crystals	Müller, Buse
10	Nonlinear optical processes in atomic and molecular clusters	Plenge, Rühl
11	Frequency conversion: Nonlinear optical processes in atomic and molecular clusters	Pramann, Rühl
12	Nonlinear interactions of space charge waves in photorefractive crystals	Rahe, Krätzig
13	Magnetoinductive waves in metamaterials	Shamonina
14	Reflection and transmission of a plane TE-wave at a lossless nonlinear dielectric film with a permittivity depending on the transverse coordinate	Svetogorova, Schürmann
15	Noncollinear second-harmonic generation in strontium barium niobate	Tunyagi, Betzler
16	Growth and characterization of $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ crystals with x ranging from 0.32 to 0.82	Ulex, Betzler, Pankrath
17	Nonlinear optical properties of photorefractive strontium-barium niobate crystals	Wesner, Krätzig
18	Oxide waveguides for optical frequency conversion	Wirp, Kip
Current Projects		
19	Initial scattering processes in the field of holographic scattering	Bastwöste, Imlau
20	Light-induced absorption changes in the visible and infrared range in ferroelectric crystals	Gubaev, Kapphan
21	Dynamics of solitons	Hage, Schmidt
22	Investigation of wave phenomena in metamaterials	Hesmer, Shamonina
23	Nonlinear optical properties of bacteriorhodopsin	Krasnaberski, Steinhoff
24	Elliptic solutions of some nonlinear wave and evolution equations and their linear superposition	Nickel, Schürmann

*: Chief Executive Authors, Chief Executive Artists

Posters for the Report Seminar November 19th, 2004 (continued)

	Title (preliminary)	CEA*
25	Growth and characterization of $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ crystals	Podlozhenov
26	Energy transfer and light amplification with holographic scattering in photorefractive crystals	Schwalenberg, Krätzig
27	Solitary objects on quantum spin rings	Shchelokovskyy, Schnack
28	Optical properties of perovskite surfaces	Shi, Borstel
29	Defect studies in high-purity fluorite for optical applications	Sils, Reichling
30	Wave mixing in nonlinear metamaterials	Sydoruk, Shamonina
Scheduled Projects		
31	Nonlinear generation of light in strontium barium niobate	Betzler
32	k-space spectroscopy of structural phase transitions	Betzler
33	Nonlinear phenomena in centro-symmetric crystals	Imlau
34	UV-induced optical defects during optical harmonic generation	Imlau
35	Influence of double doping on the relaxor properties of strontium barium niobate	Imlau
36	Characterization of perovskites	Neumann
37	Dynamics of ferroelectric domains under high electric fields	Wöhlecke
38	Influence of doping and composition on ferroelectric domains in the relaxor ferroelectric strontium barium niobate	Wöhlecke
39	Optical properties of perovskite surfaces	Borstel
40	Defect structures and optical properties of CaF_2	Borstel
41	Defect kinetics and optical absorption of CaF_2 under laser illumination	Eglitis, Borstel
43	Energy transport in quantum chains featuring nonlinear couplings	Gemmer
44	Chemical synthesis and nonlinear optical properties of lanthanoid-doped kolloid LiYF_4 and LiGdF_4 nano-particles	Haase
45	Magnetic and optic properties of organo-metallic materials	Neumann
46	Optical properties of molecules and molecular films on dielectric surfaces	Reichling
47	Nonlinear optical properties of modified bacteriorhodopsins	Steinhoff
48	Magnetic solitons in magnetic ring molecules with anisotropic spin-spin interaction	Schnack
49	Electro-active dendrimers with built-in light absorber	Walder

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