



IAP
INSTITUTE OF APPLIED PHYSICS

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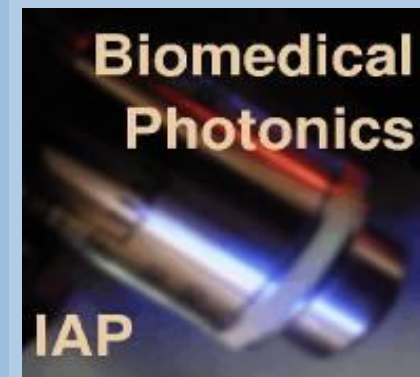
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Welcome to BMPN SLN meeting!

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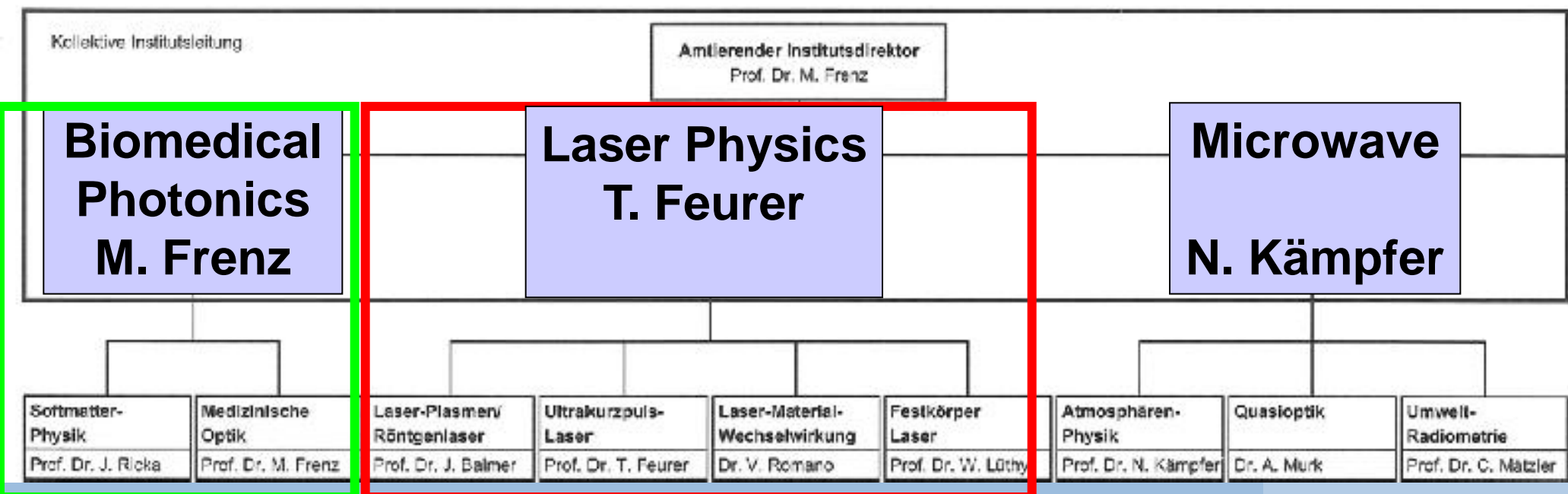


Research at IAP

**Generation of el-mag. radiation
from X-rays to microwaves**

and

**investigations of interaction mechanisms
with matter**



Laser Physics department

- **Laser-produced plasmas / X-ray laser**
- **Laser-material interaction and laser-induced phase transitions**
- **Fabrication and investigation of multi-core and photonic bandgap fibers, fiber lasers (fiber drawing facility)**
- **Ultrafast lasers, nonlinear optics, pulse-shaping and coherent control**
- **THz generation, coherent THz spectroscopy, integrated THz signal processing, meta-materials**

Therapeutic applications

„Light used as carrier of energy“

- tissue welding/soldering
- nanosurgery
- near-IR laser scalpel
- clinical applications

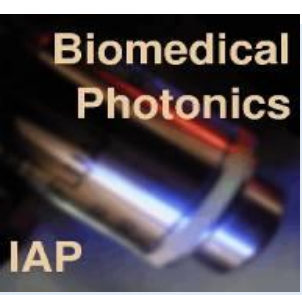
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Diagnostic applications

„Light used as carrier of information“

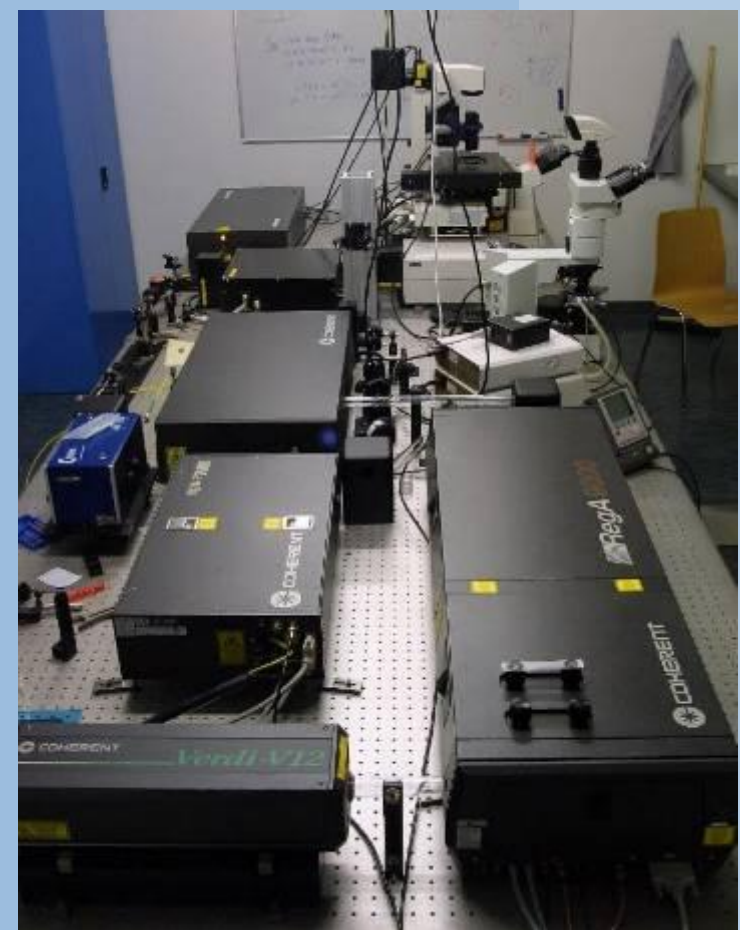
- light propagation
- multiphoton microscopy
- evanescent microscopy
- optoacoustic imaging
- speckle interferometry

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**Highlight of the year:
High end facility for multiphoton imaging
and nano-surgery**

Haag Streit Lab





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**Have a good
meeting!**

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