



**Physikalisches Kolloquium**  
**Einladung**

**Physics Colloquium**  
**Invitation**



**Monday, 24 June 2019**



Lecture Hall N24/H13, 16:15

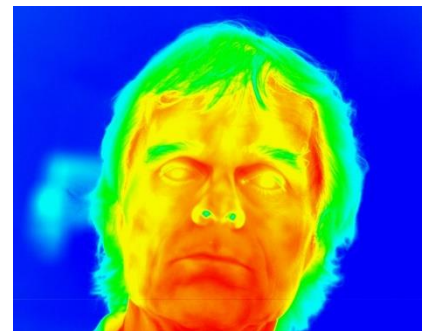
Coffee and cookies will be served in front of the lecture hall from 16:00

**IR Imaging: Teaching, Research and Applications**

**Prof. Dr. Michael Vollmer**

Technische Hochschule Brandenburg  
Fachbereich Technik  
Brandenburg an der Havel

 [HOMEPAGE](#)



In recent decades, infrared cameras have become valuable tools in industry for mechanical and electrical engineering, building insulation analysis, gas detection and many other applications. However, they have not only established themselves as sensitive tools for predictive maintenance and condition monitoring, but for many other applications as well. These include on the one hand science and research topics; on the other hand, the remote contactless 2-dim temperature measurement makes them excellent visualization tools in teaching physics.

Widespread use was initially impeded by the sometimes prohibitively high costs of commercial IR cameras. The progress in microsystem technologies and mass production has changed this unfavourable situation and recently compact thermal IR cameras have become widely available, some models as smartphone accessories for even less than 500\$. The talk will introduce IR camera science and technology and discuss some exemplary applications in science, industry and how to utilize such cameras in teaching physics.