

# DIESE WOCHE

## PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik  
der Johann Wolfgang Goethe-Universität Frankfurt

Mittwoch, den 20.05.2015, 16 Uhr c.t.  
Großer Hörsaal, Raum \_0.111,  
Max-von-Laue-Str. 1

**PD Dr. George Bruls**  
Physikalisches Institut,  
Johann Wolfgang Goethe-Universität Frankfurt

*"Abbe, Bessel, Newton: Focal length  
measurement and thin-lens theory"*

We show that recent developments in non-paraxial geometrical optics(1) allow highly accurate numerical and analytical descriptions of the optical properties of real-life lens systems, including focal length, (position of) principal planes and typical (cushion and barrel) image distortions.

(1) Dr. G.Bruls, Exact formulas for a thin-lens system with an arbitrary number of lenses. accepted for publication in Optik (Elsevier), April 2015

Die Dozenten der Physik

# KOLLOQUIUM