

## EINLADUNG

### Literaturseminar

zum Vortrag

von

## Mikolaj Korzynski

(Warsaw)

über

# "Probing the spacetime curvature using geometric optics"

#### Abstract:

In general relativity light propagation is affected by gravity, leading to the well-known effects of light bending, Shapiro delays and gravitational redshift. On top of that the results of observation of light by an observer are also affected by the special relativistic phenomena like the aberration or time dilation. All these effects influence the measurements of shape, parallax, redshift and position drift (proper motion) of distant objects. We show that all results of those measurements can be understood as functions of the curvature along the line of sight. This opens up the possibility to probe the spacetime curvature directly using only optical observations.

#### Zeit: Donnerstag, 04.04.2019, 14.00

**Ort**: Arbeitsgruppe Gravitation, Währinger Straße 17, Seminarraum 218, 2. Stock

gez.: P. T. Chruściel, D. Fajman