

Versuche zur Vorlesung Physik für Maschinenbau

Vorlesung 13

Dr. Thomas Kirn

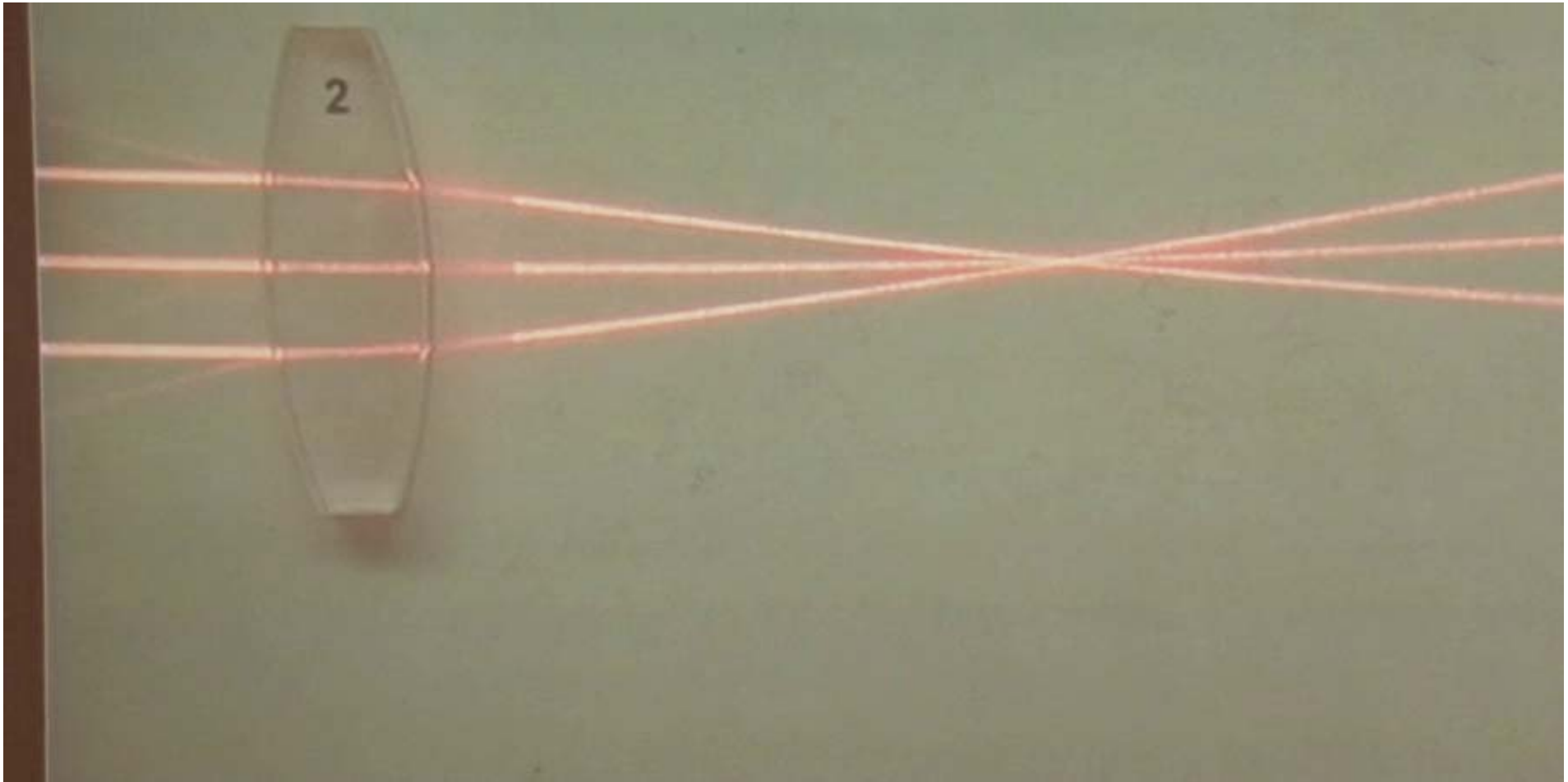


Übersicht Aufbau Bühne Fo1

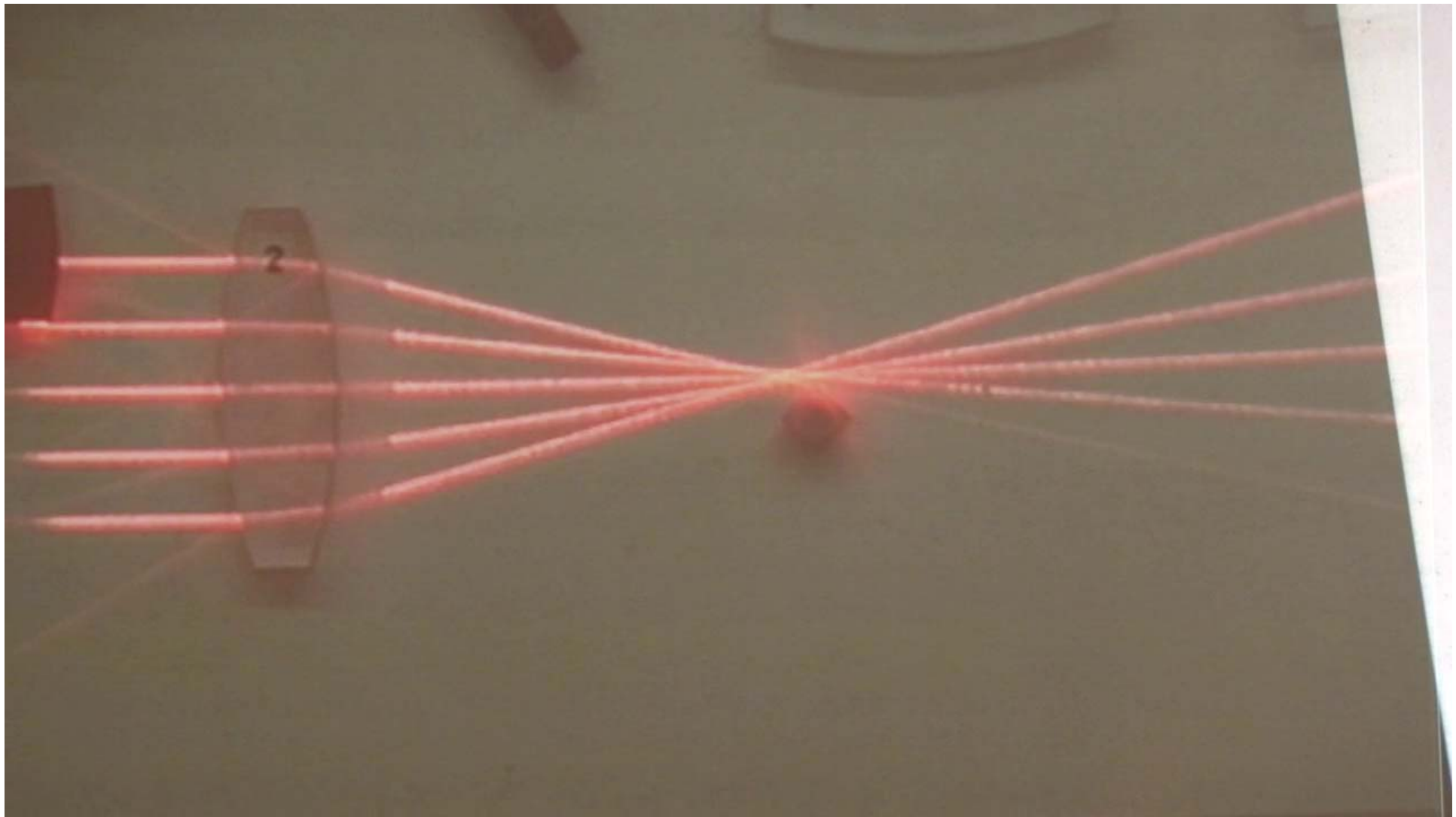


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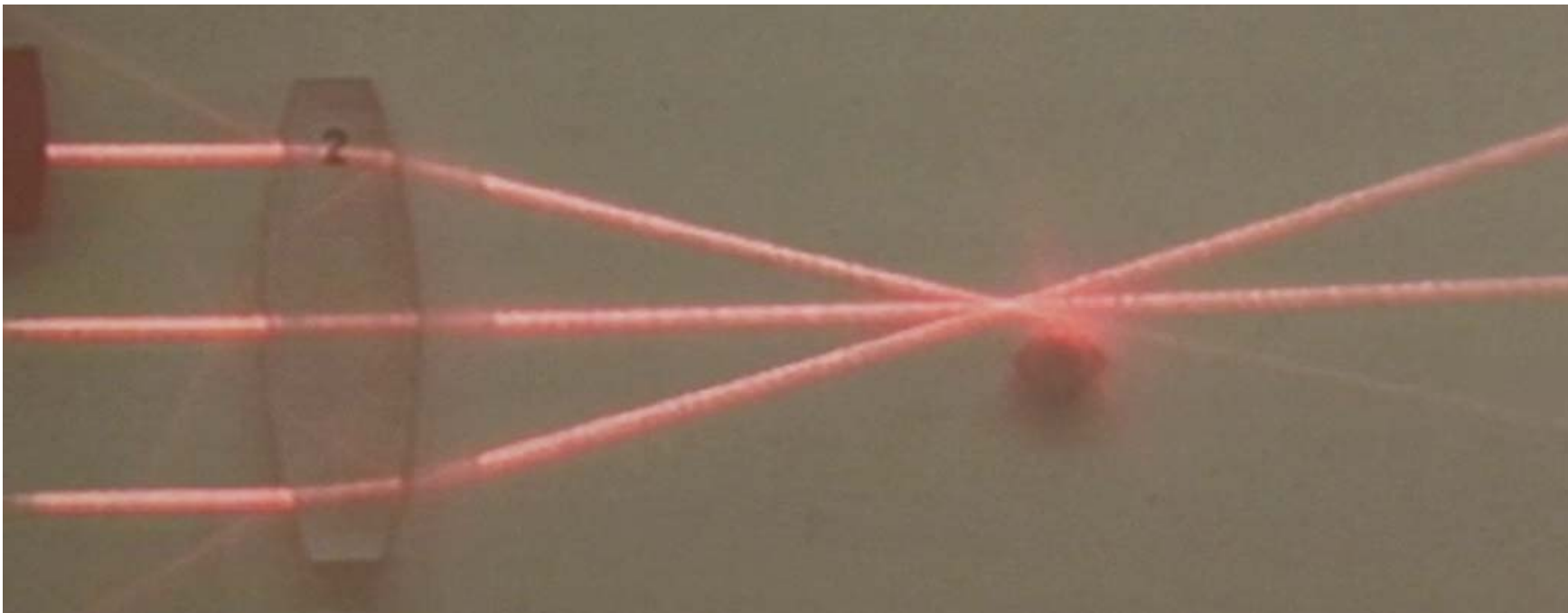
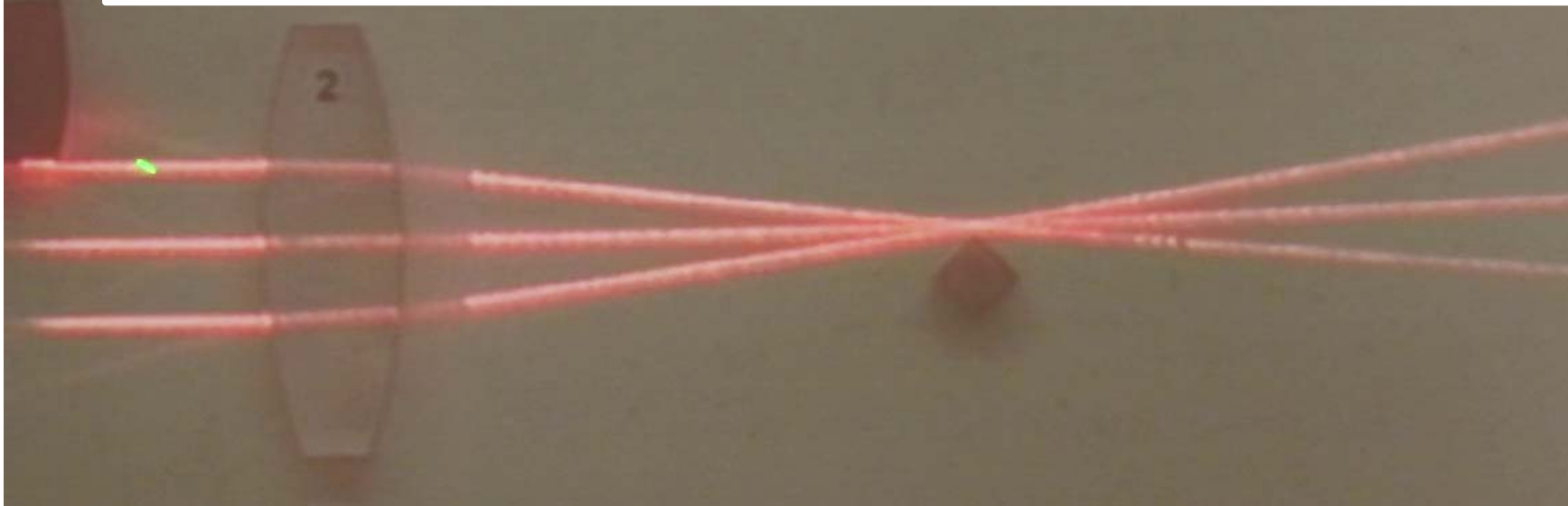
Wiederholung: Geometrische Optik, Sammellinsen



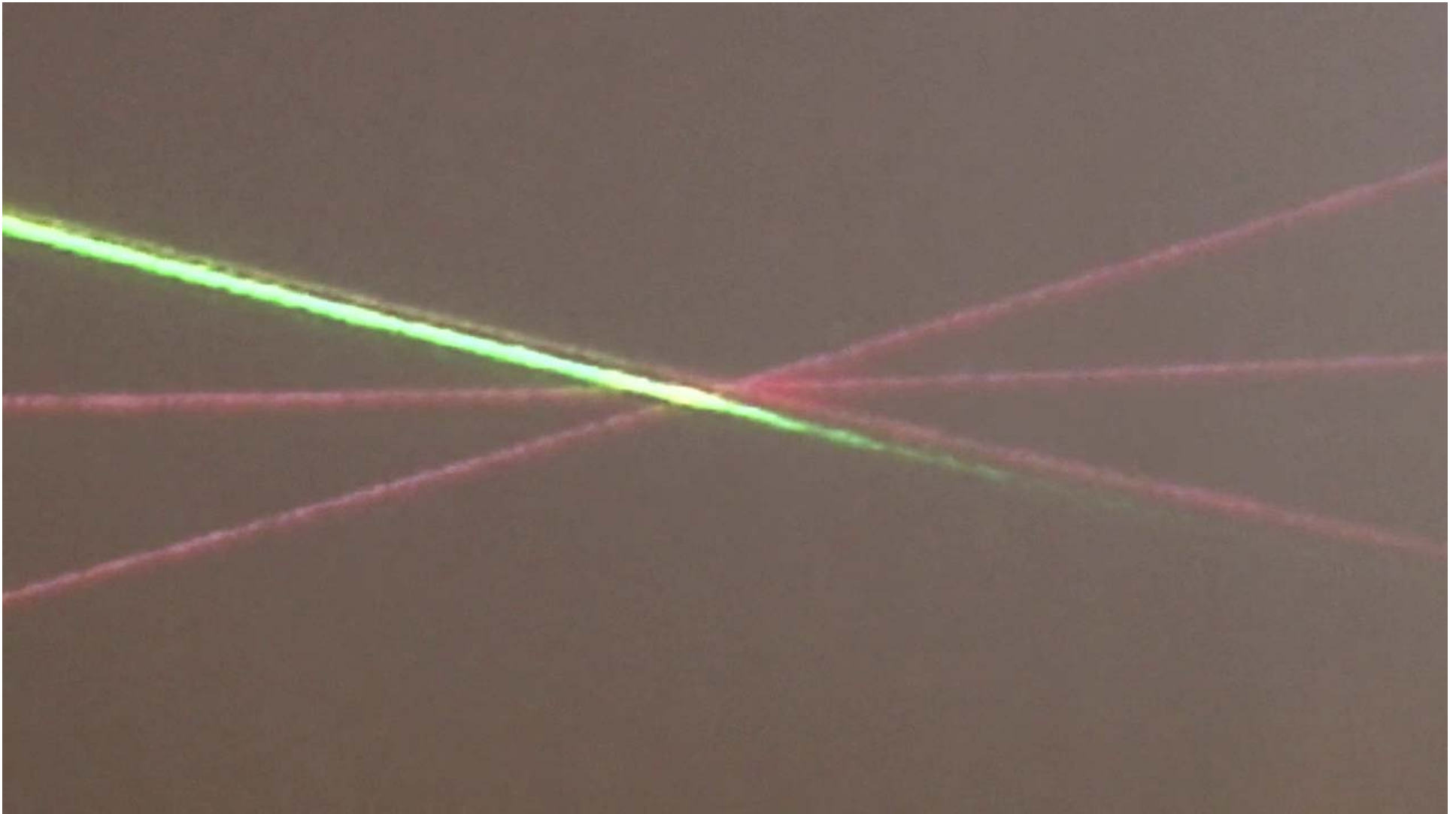
Geometrische Optik, sphärische Aberration



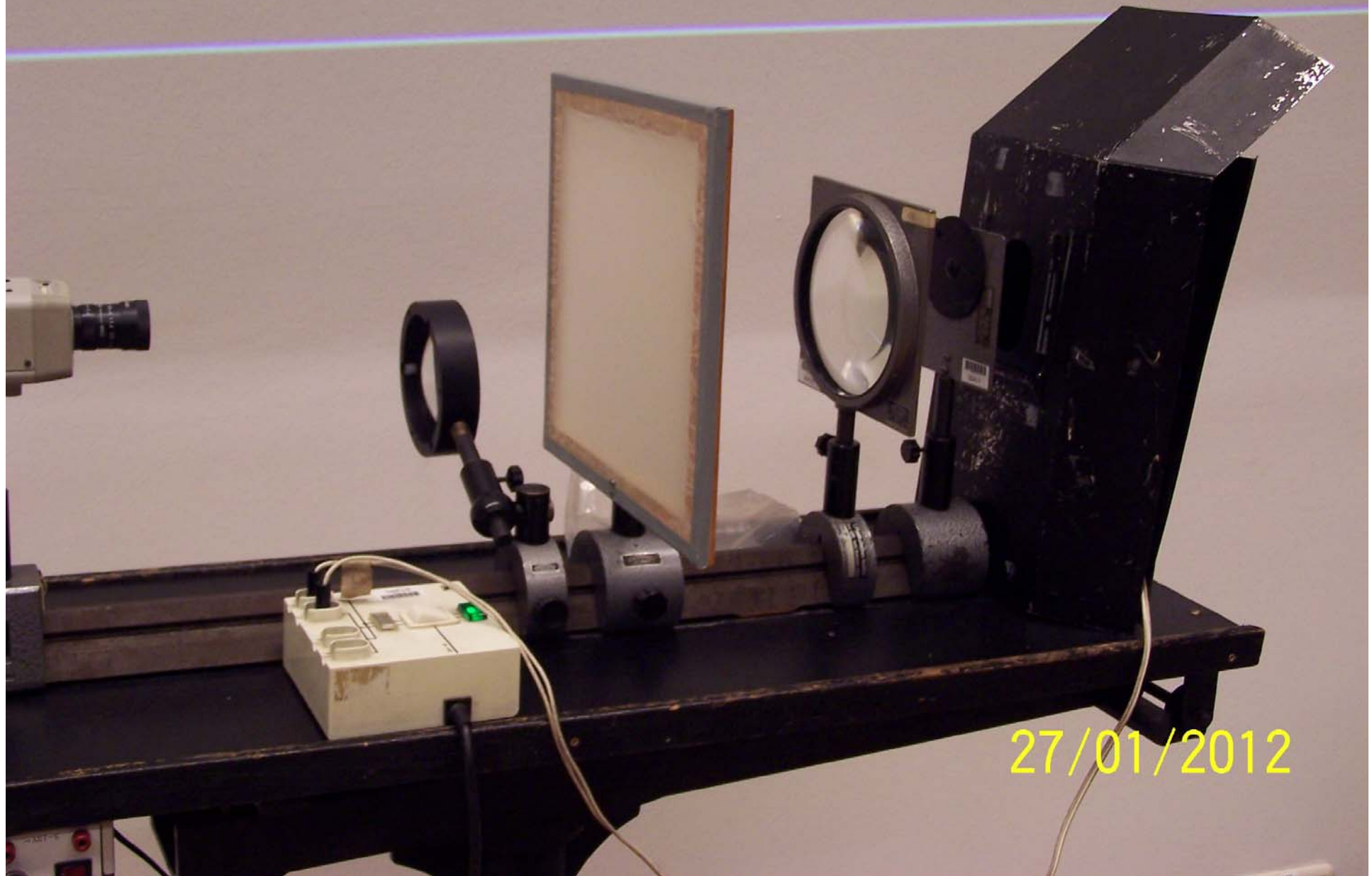
Geometrische Optik, sphärische Aberration



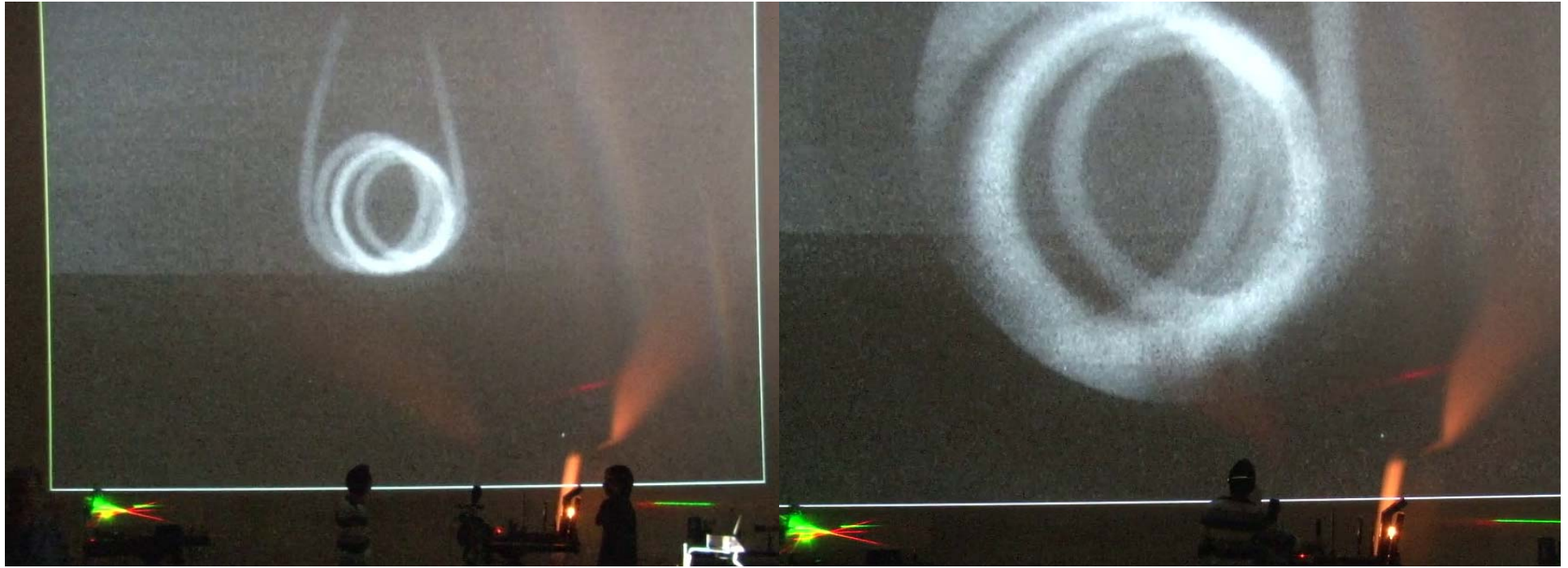
Geometrische Optik, chromatische Aberration



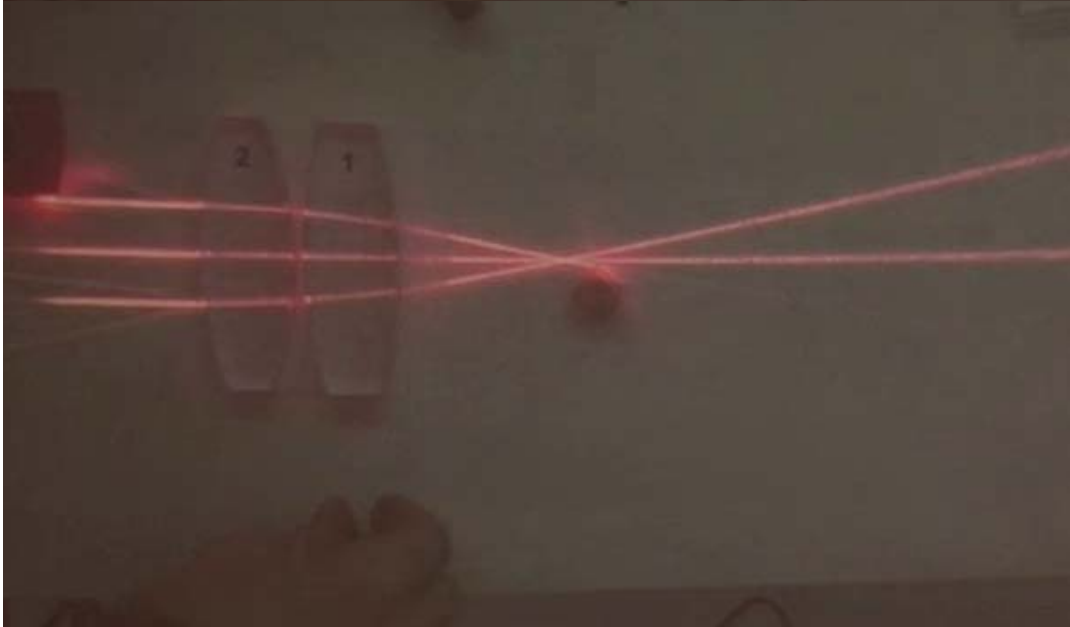
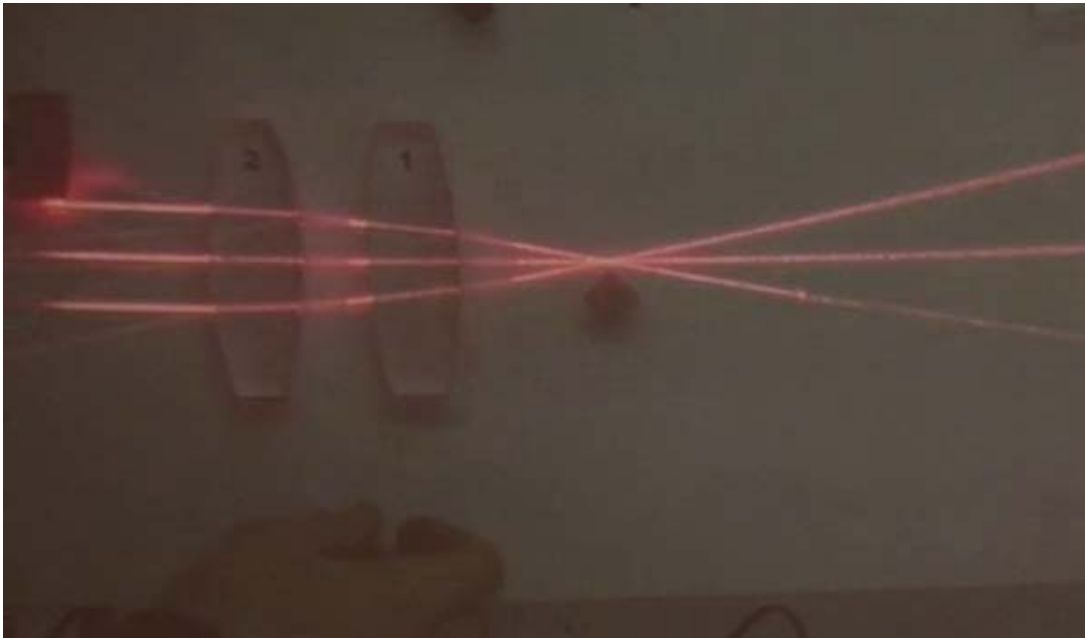
Optische Instrumente: Lupe



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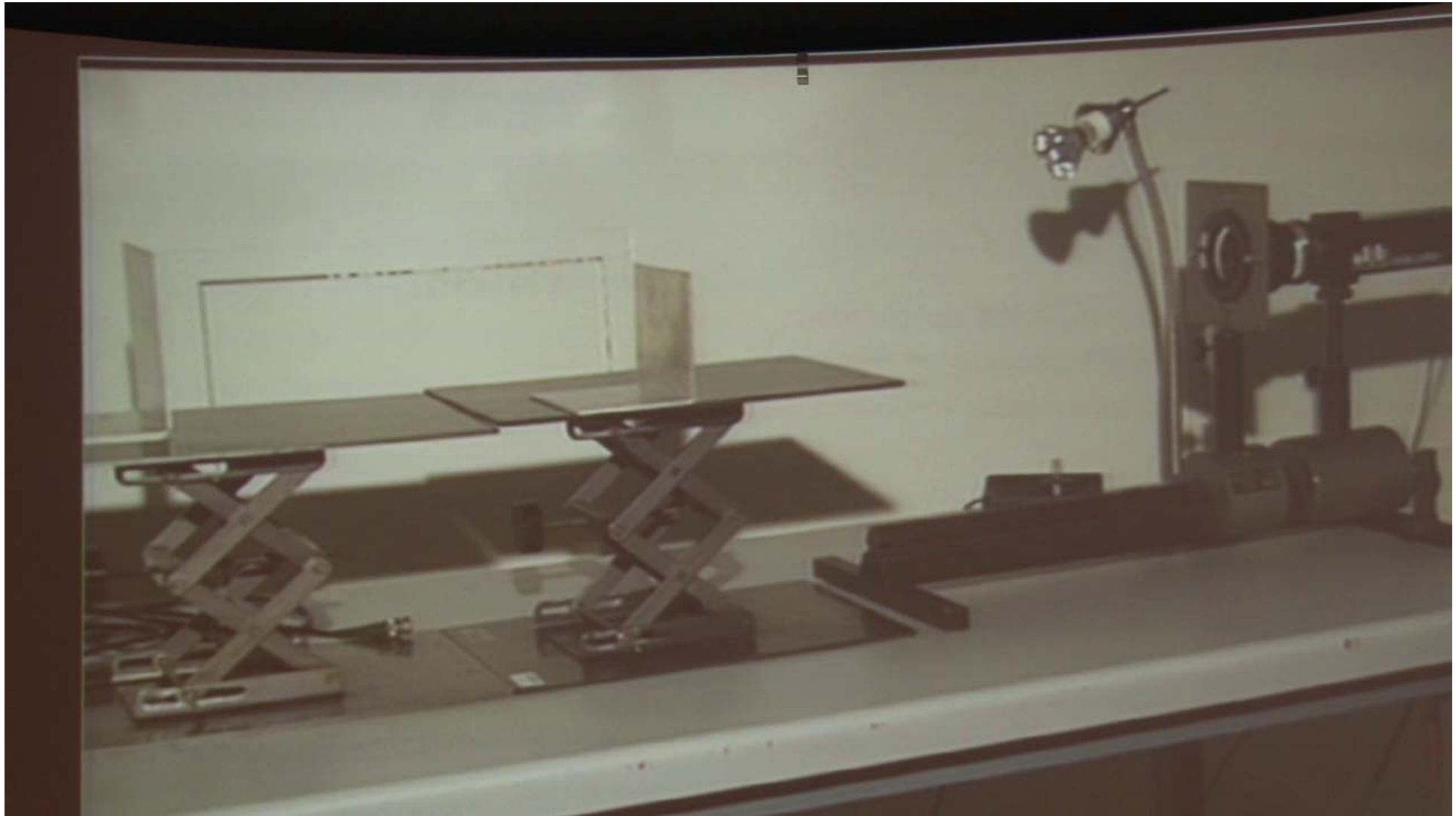
Optische Instrumente: Linsensysteme



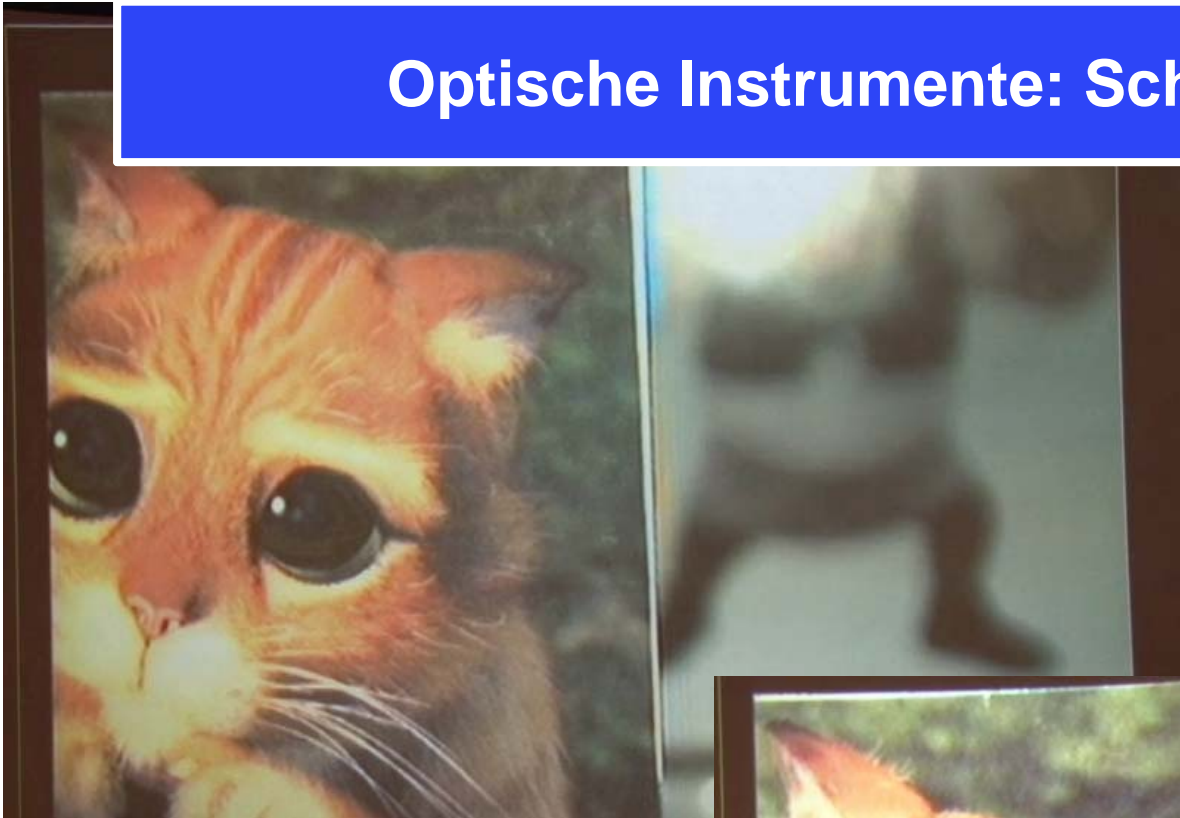


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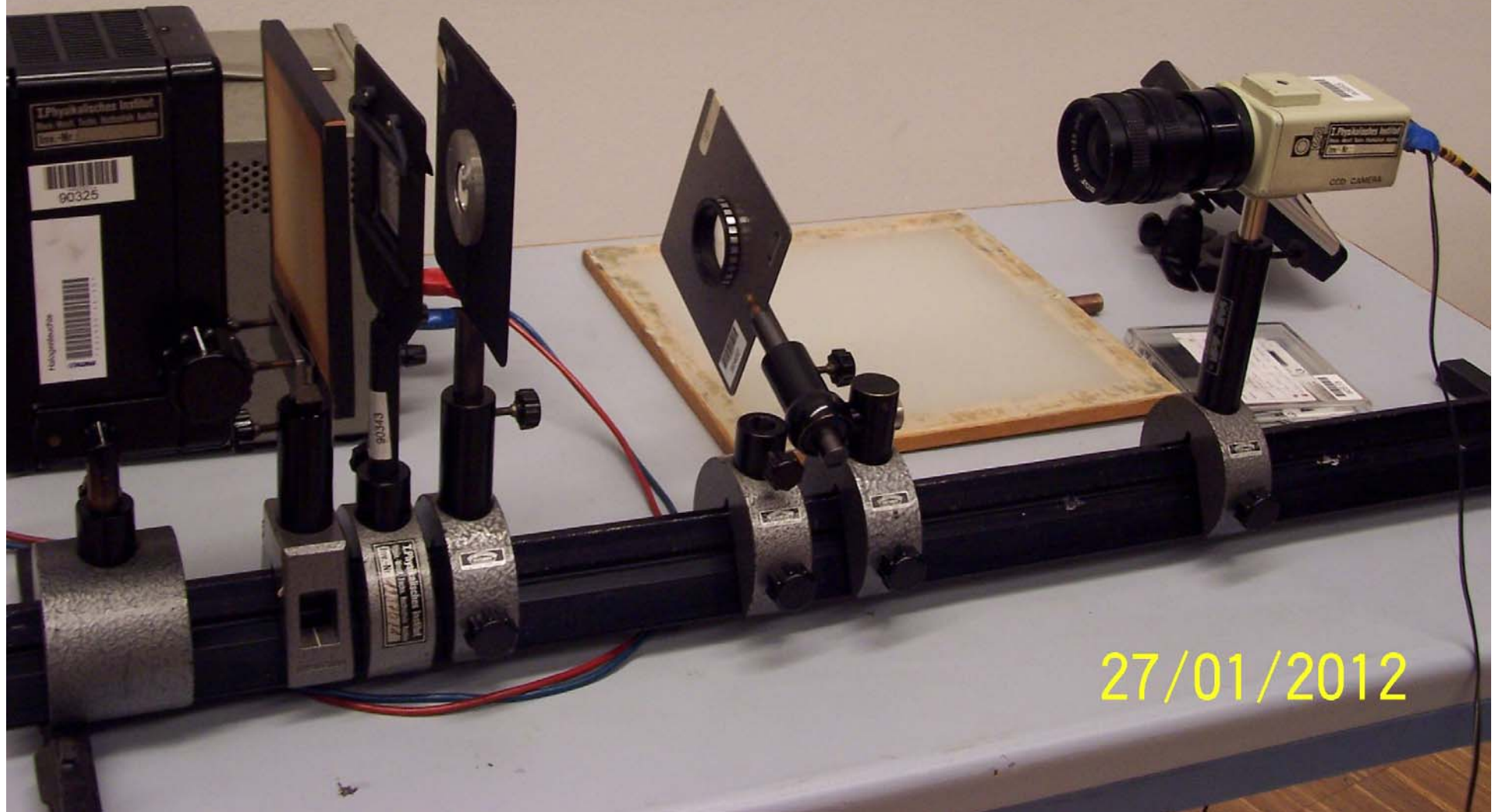
Optische Instrumente: Schärfentiefe



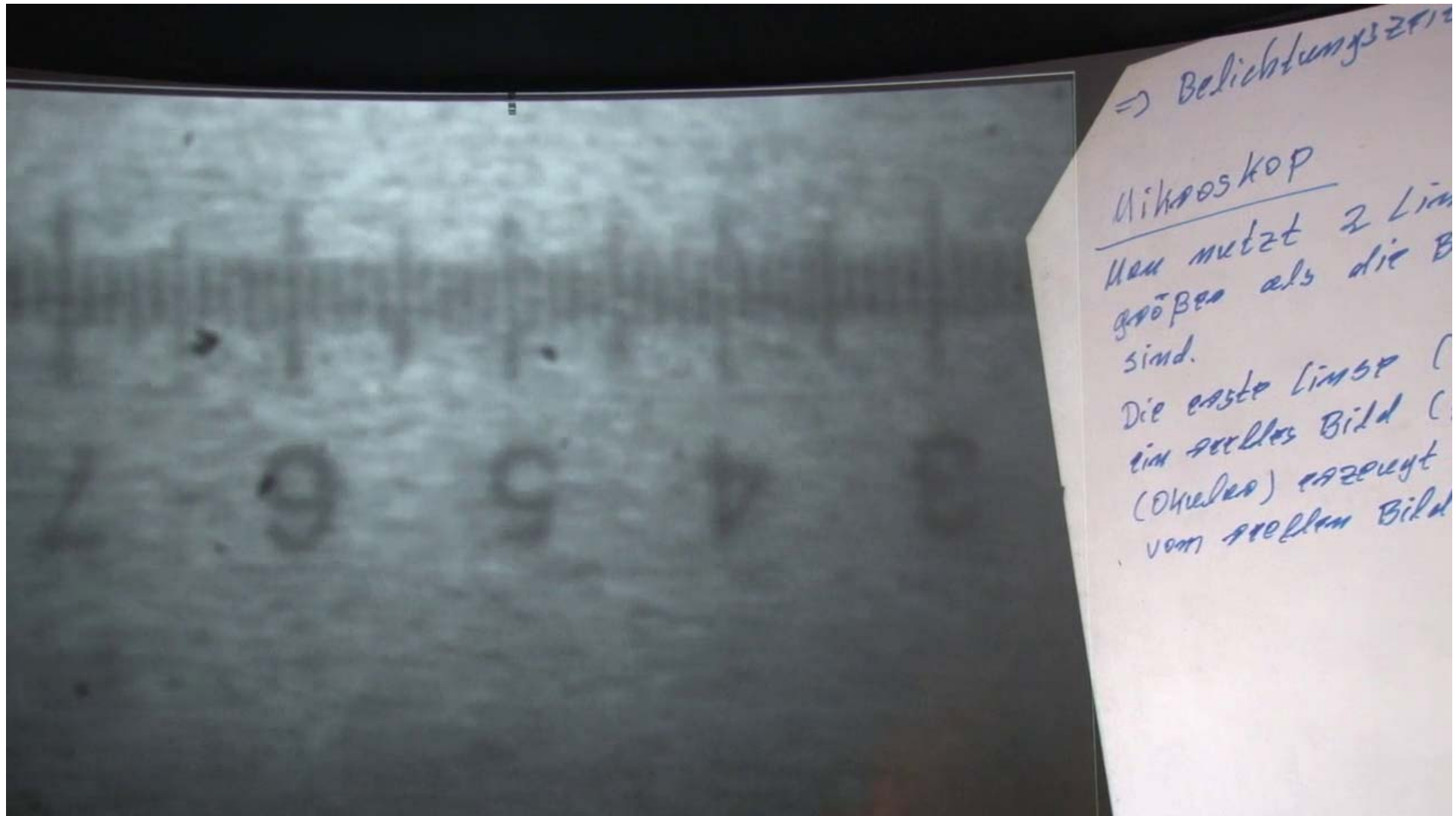
Optische Instrumente: Schärfentiefe



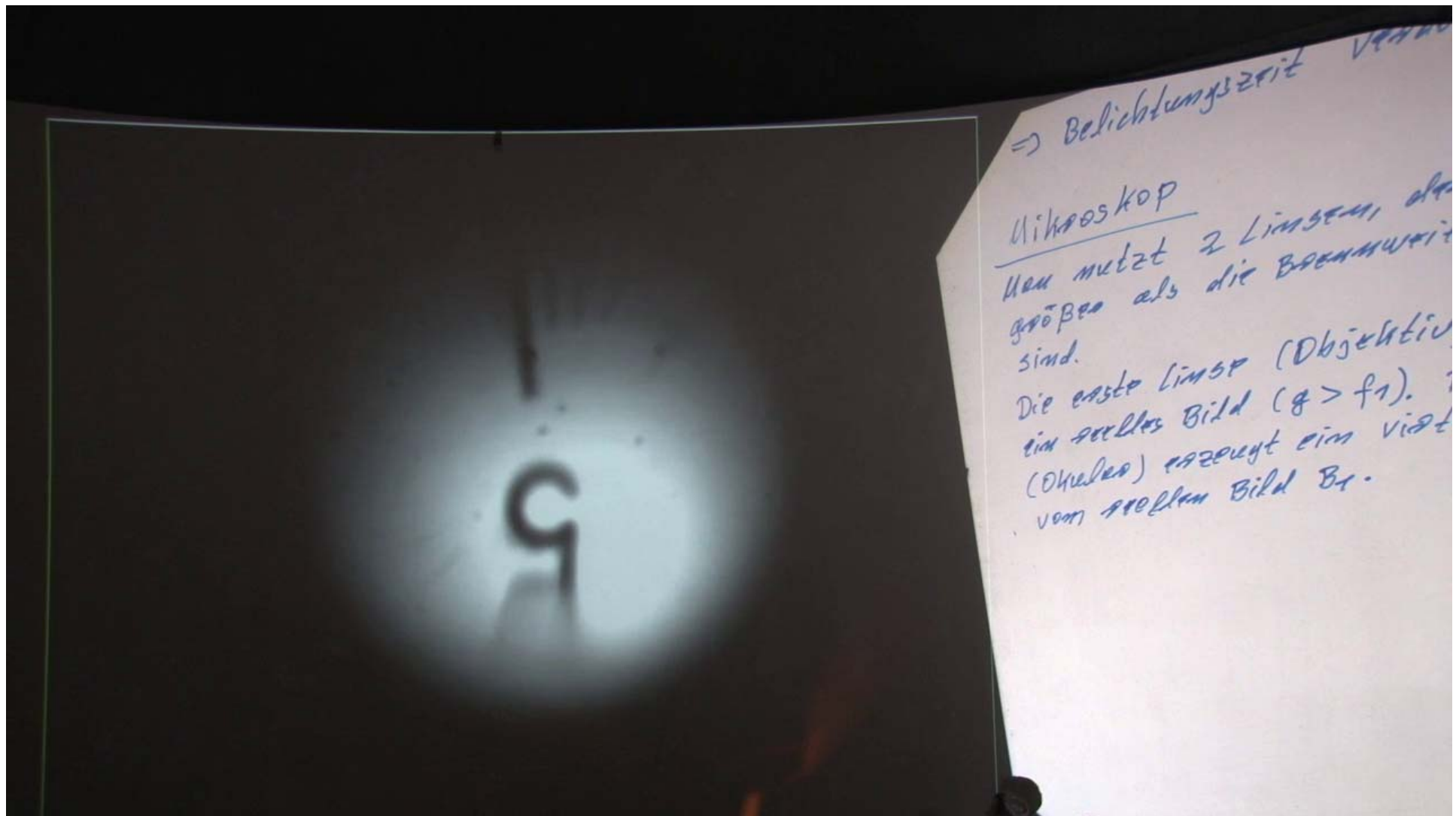
Optische Instrumente: Mikroskop



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⇒ Belichtungszeit ∞

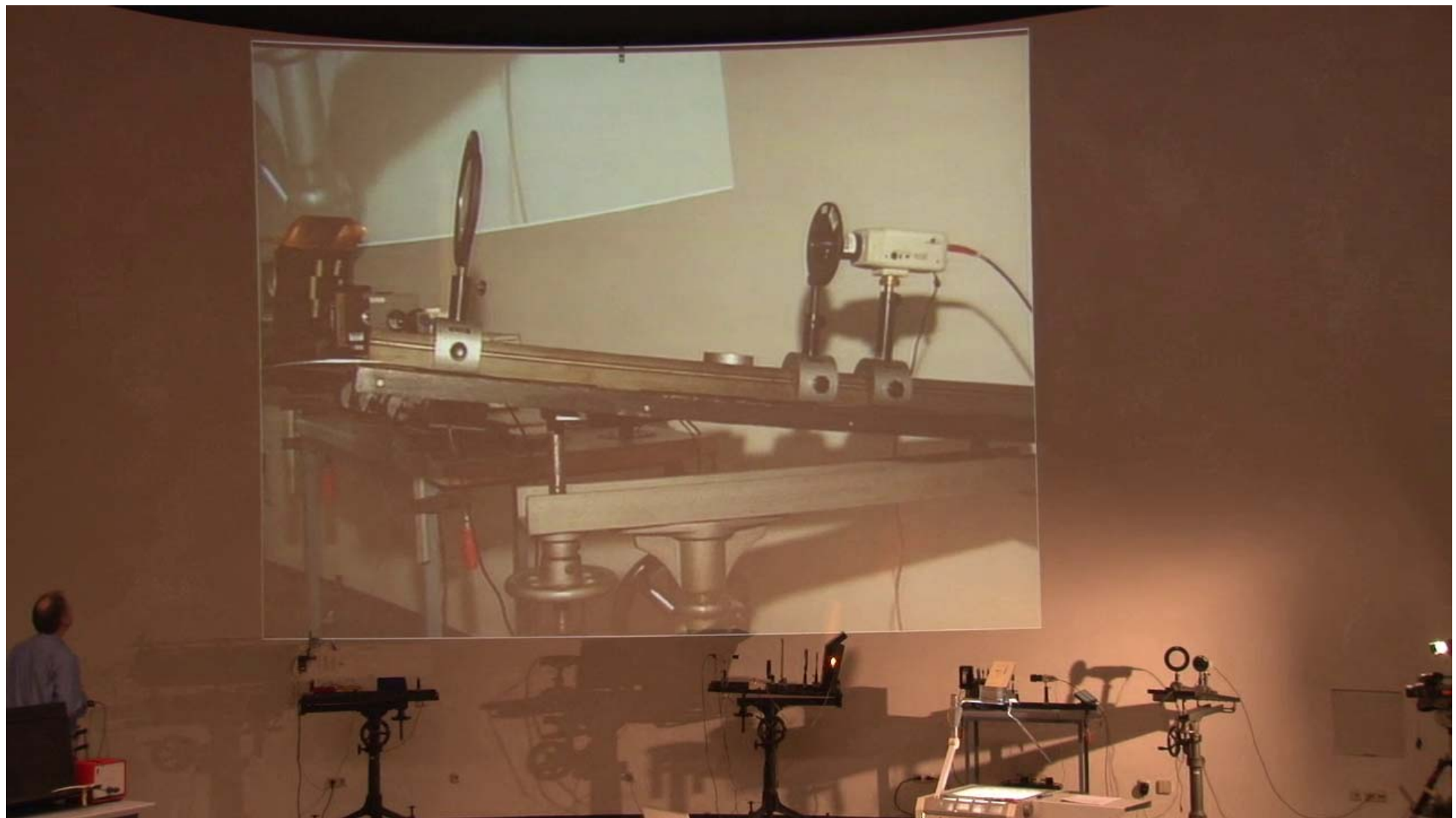
Mikroskop
Man nutzt 2 Linsen, die größer als die Brennweite sind.
Die erste Linse (Objektiv) erzeugt ein reelles Bild ($g > f_1$).
(Okular) erzeugt ein virtuelles vergrößertes Bild B_2 .

Optische Instrumente: Fernrohr

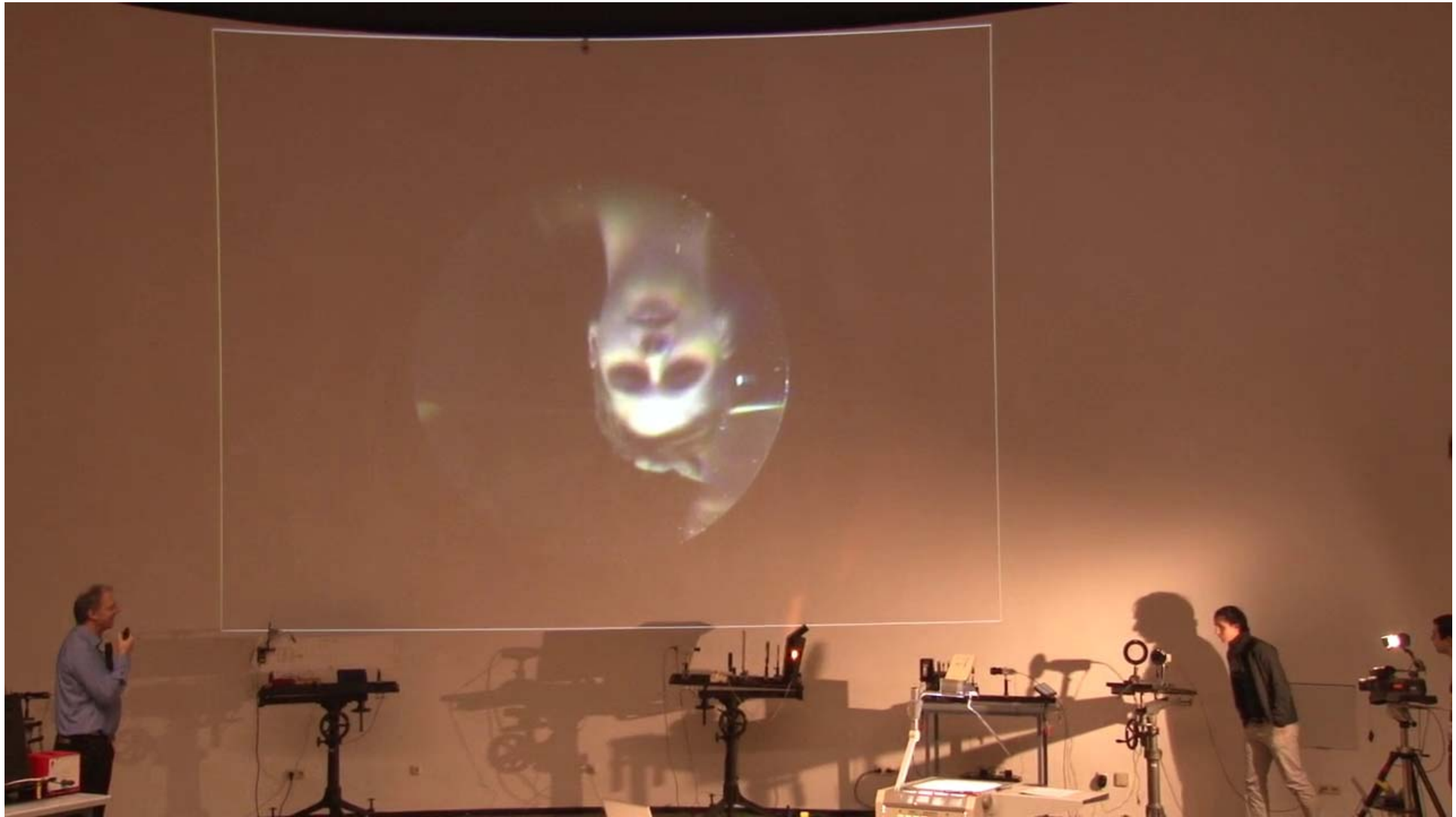


27/01/2012

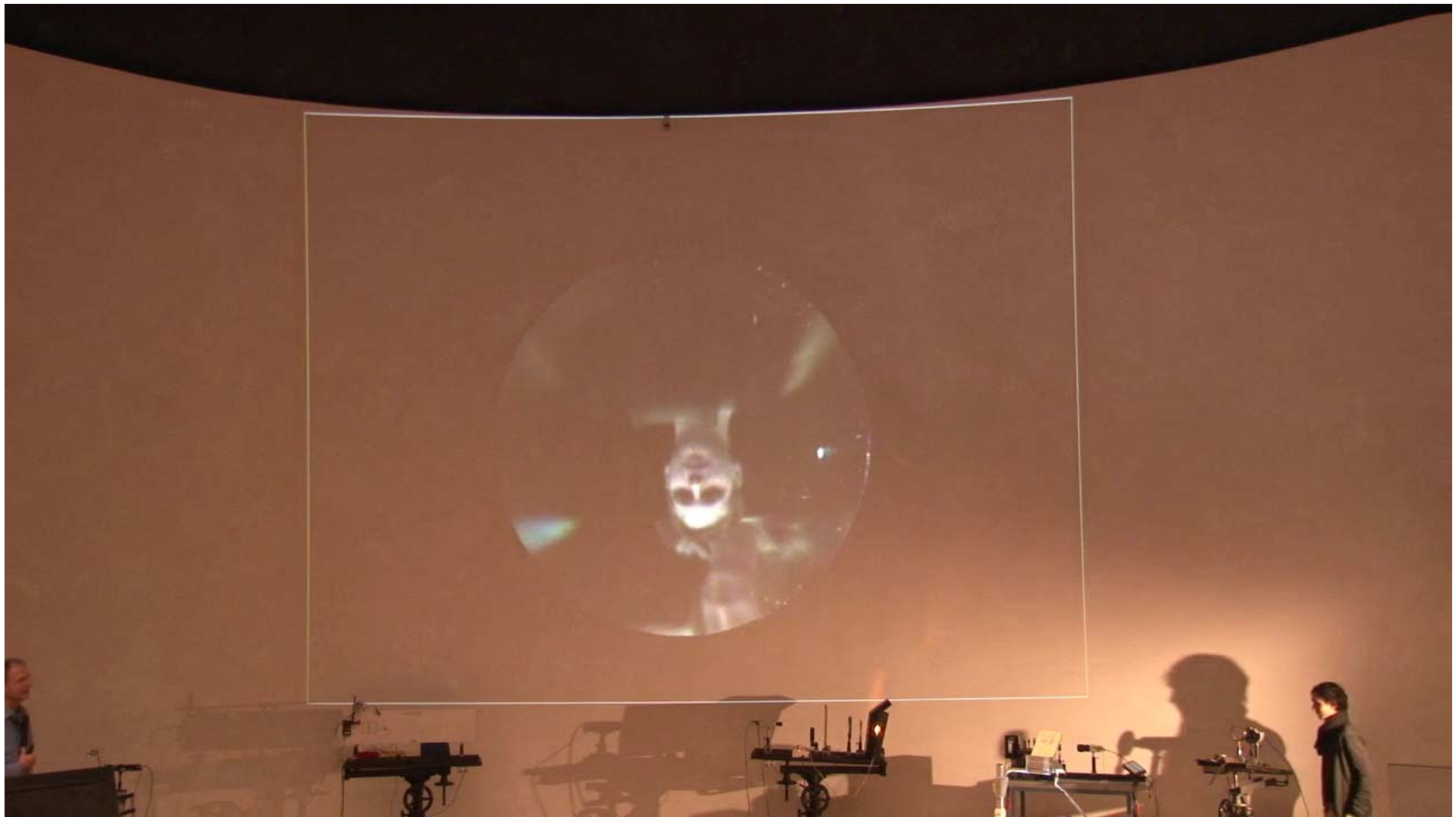
Optische Instrumente: Fernrohr



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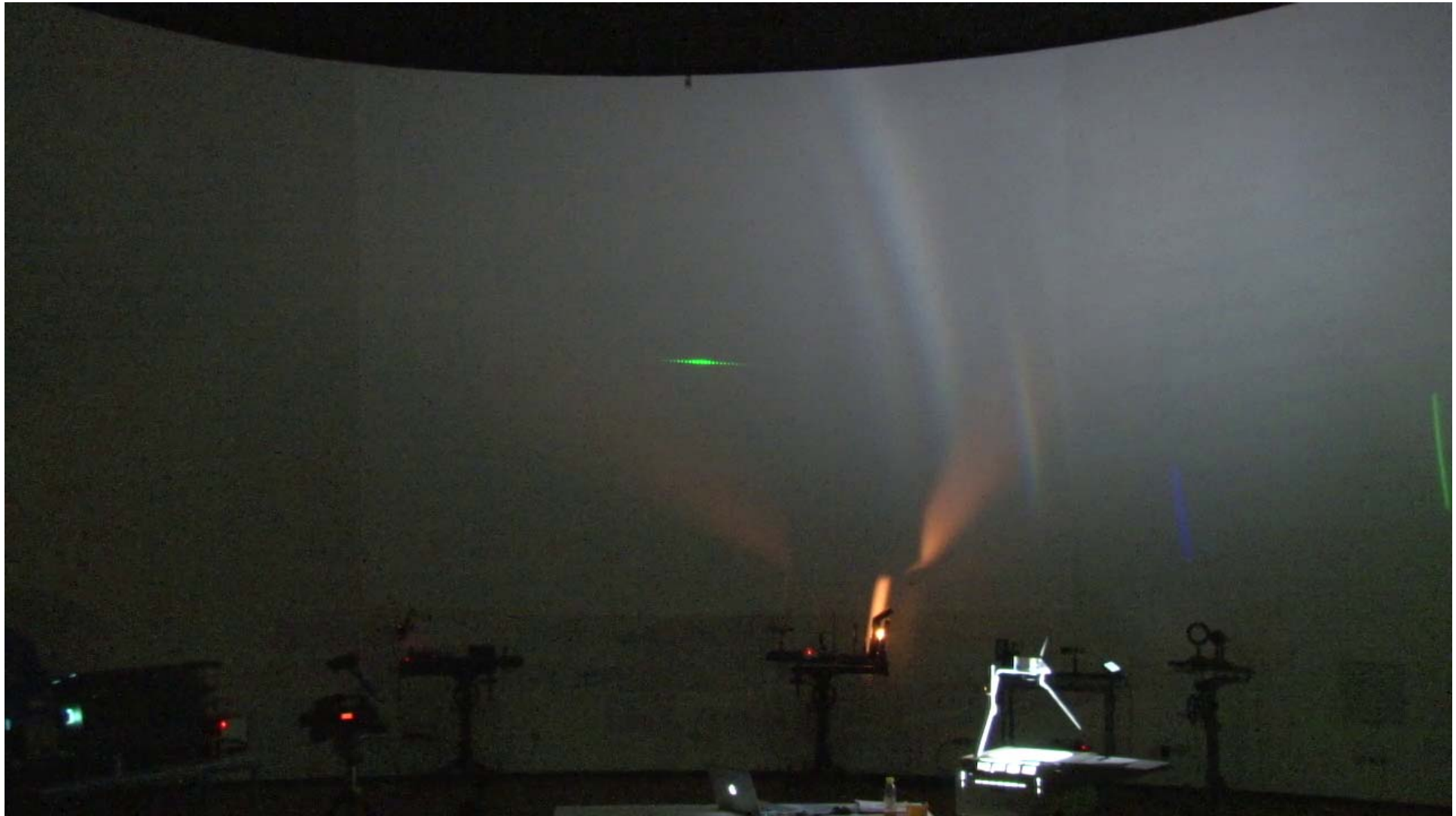
Optische Instrumente: Fernrohr



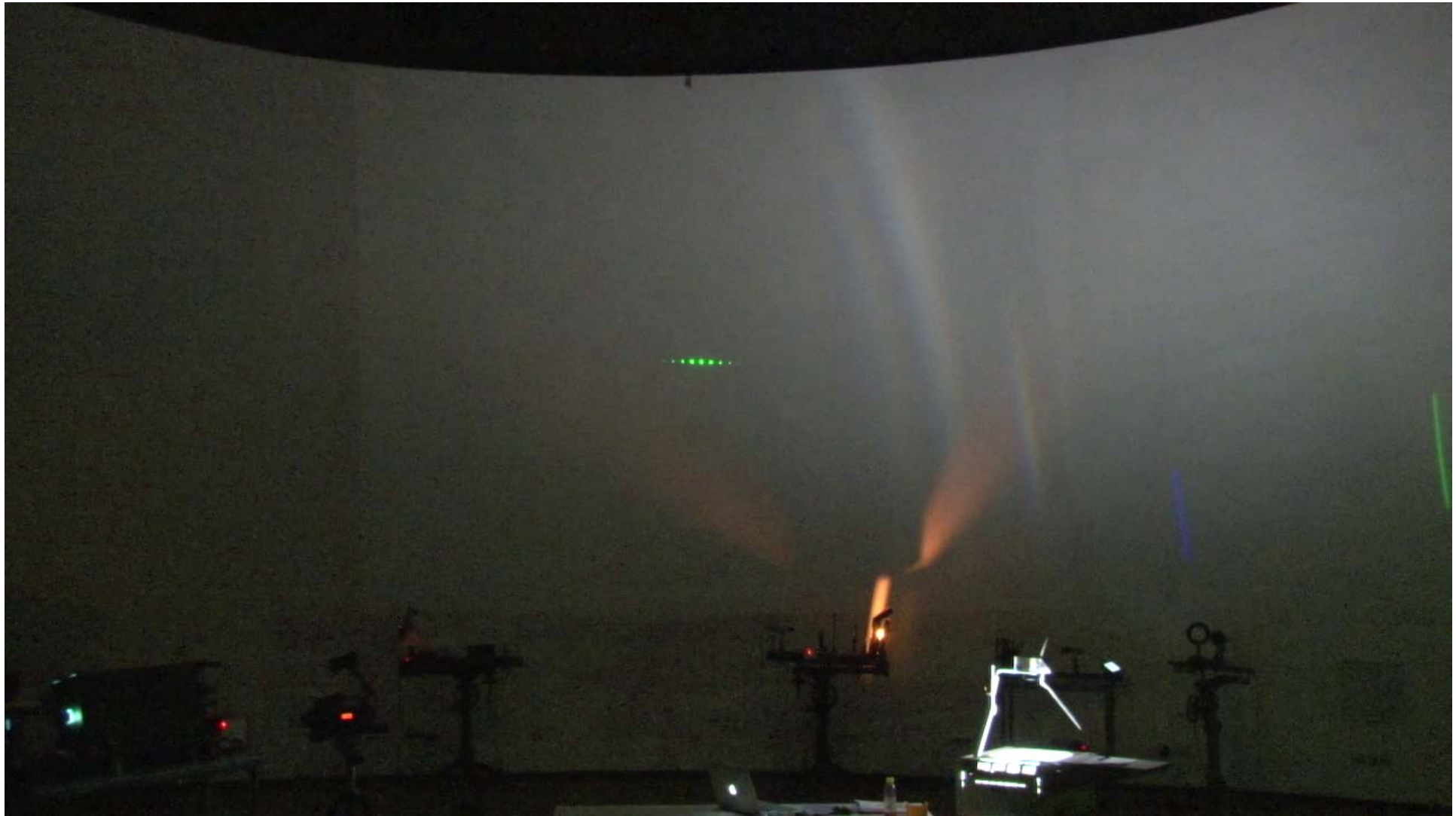
Gitterspektrometer



Gitterspektrometer: verschiedene Striche/mm



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