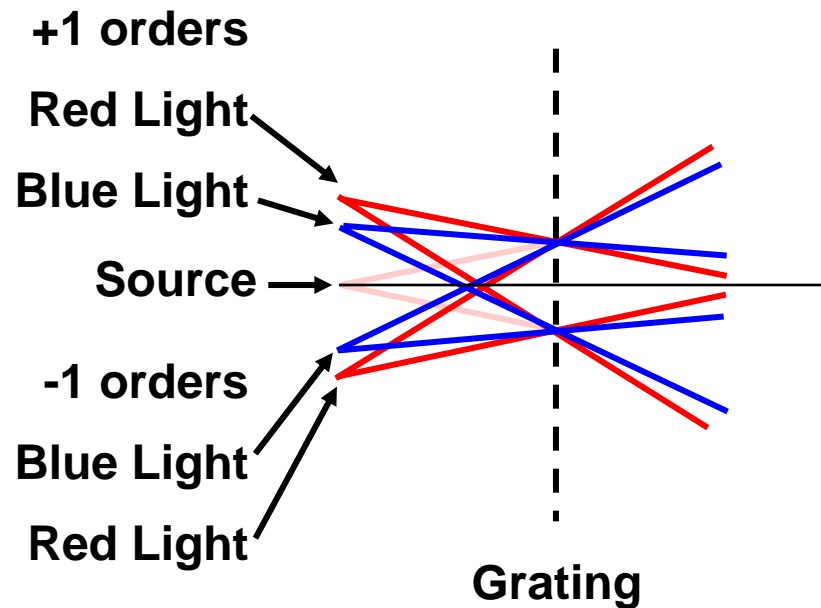


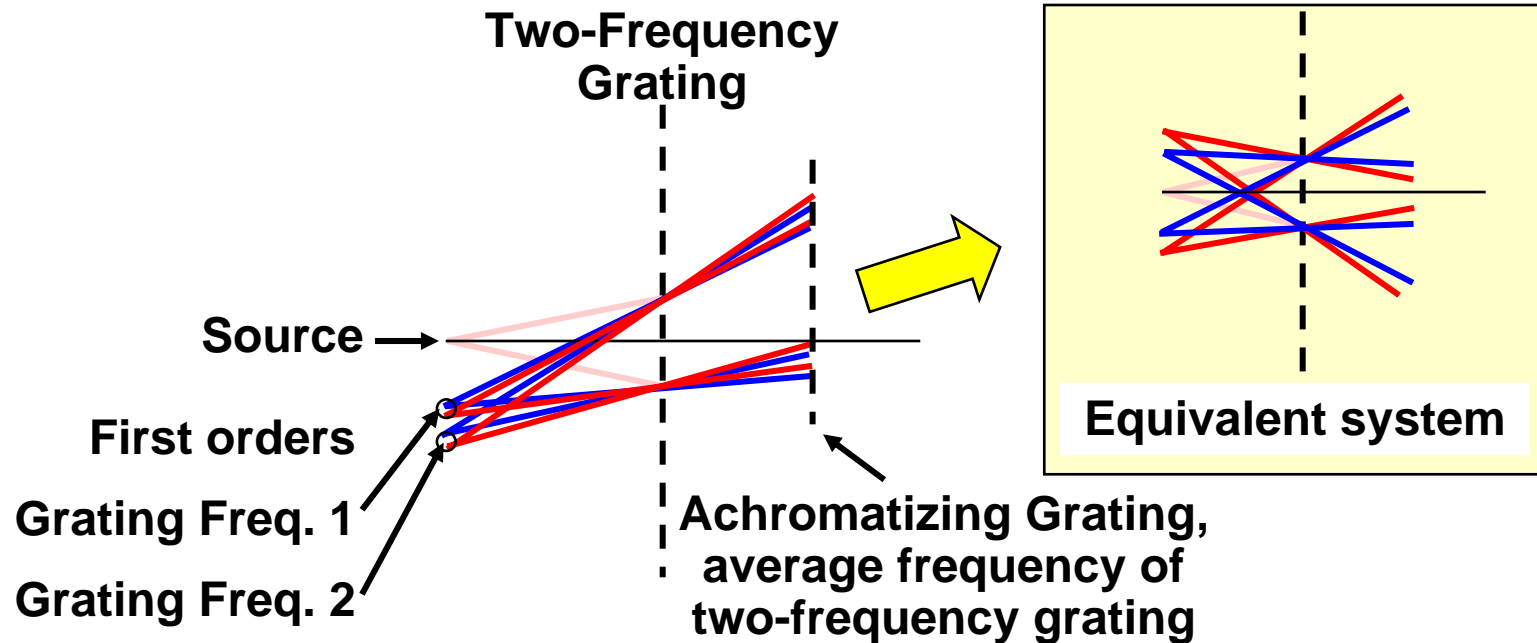
White Light Grating Interferometer



Separation between +1 and -1 orders is proportional to the wavelength. Therefore, fringe spacing same for all wavelengths.

Midpoint between sources independent of wavelength, so fringe position independent of wavelength

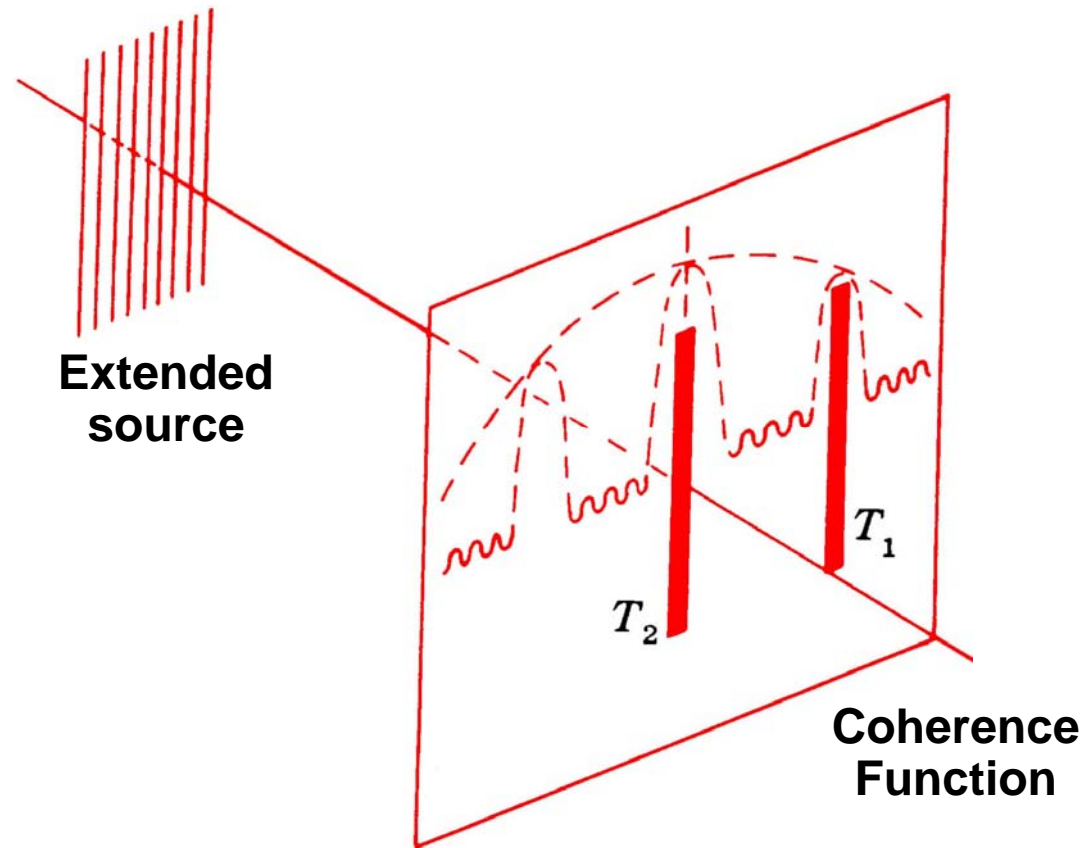
Two-Frequency White Light Grating Interferometer



Separation between the first orders of the two gratings is proportional to the wavelength. Therefore, fringe spacing same for all wavelengths.

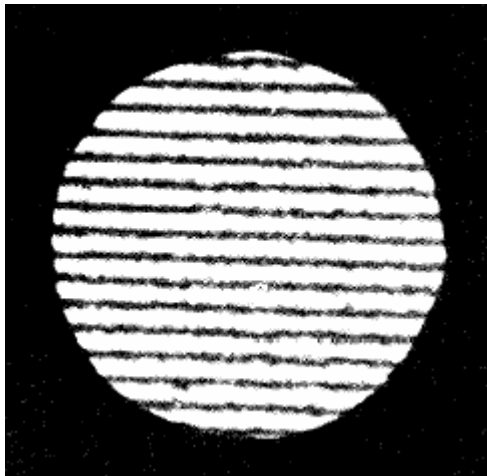
Achromatizing grating must be added to make midpoint between sources independent of wavelength, so fringe position independent of wavelength.

White Light Extended Source Lateral Shearing Interferometer

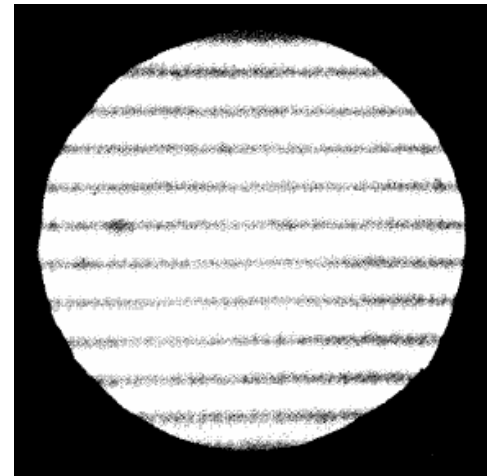


Periodic source, then periodic coherence function. Period of coherence function proportional to wavelength. Therefore, shear should be proportional to wavelength.

White Light Interferograms



**Shearing interferogram
obtained using
tungsten arc source.**



**Shearing interferogram
obtained using 60 watt
incandescent bulb with
Ronchi ruling in front of
bulb.**