

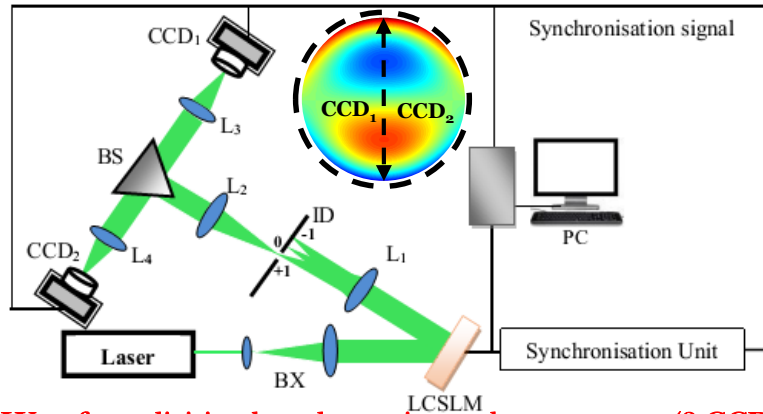


Zonal Wavefront Sensing with Improved Accuracy

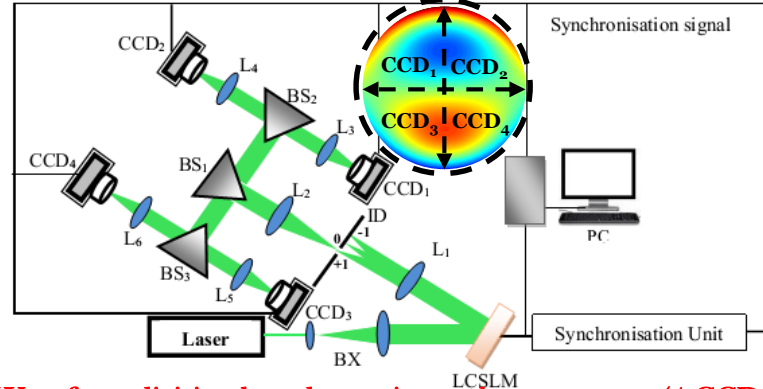
Author(s): Biswajit Pathak and Bosanta R. Boruah

Focal spots in the camera plane can be more accurately located over a larger detector sub-aperture area, by increasing the effective number of pixels due to the use of more than one digital camera to capture the focal spots.

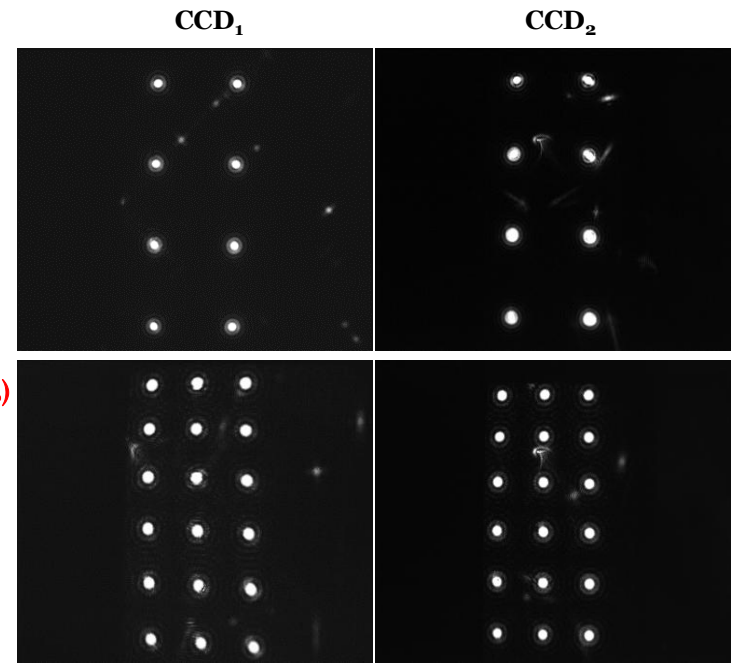
Such an arrangement, also enhances the dynamic range of the sensor and reduces the possibility of cross-talk between adjacent zones.



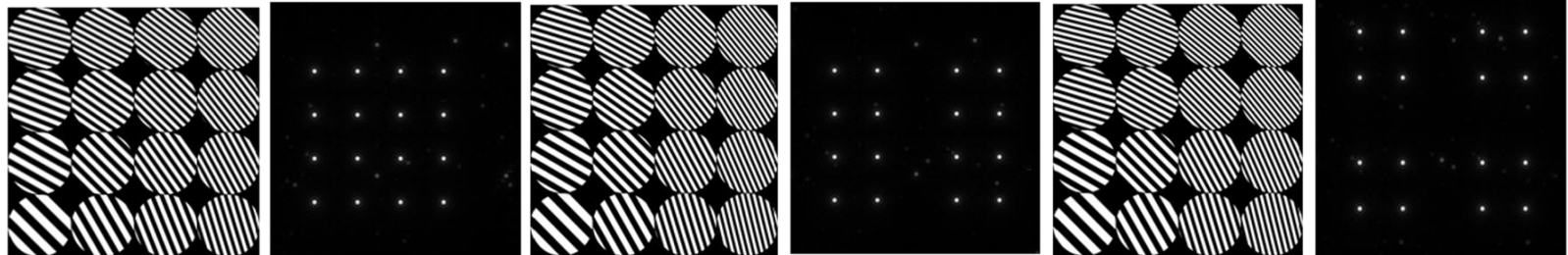
Wavefront division based experimental arrangement (2 CCDs)



Wavefront division based experimental arrangement (4 CCDs)



Experimental Results



Numerical Simulation