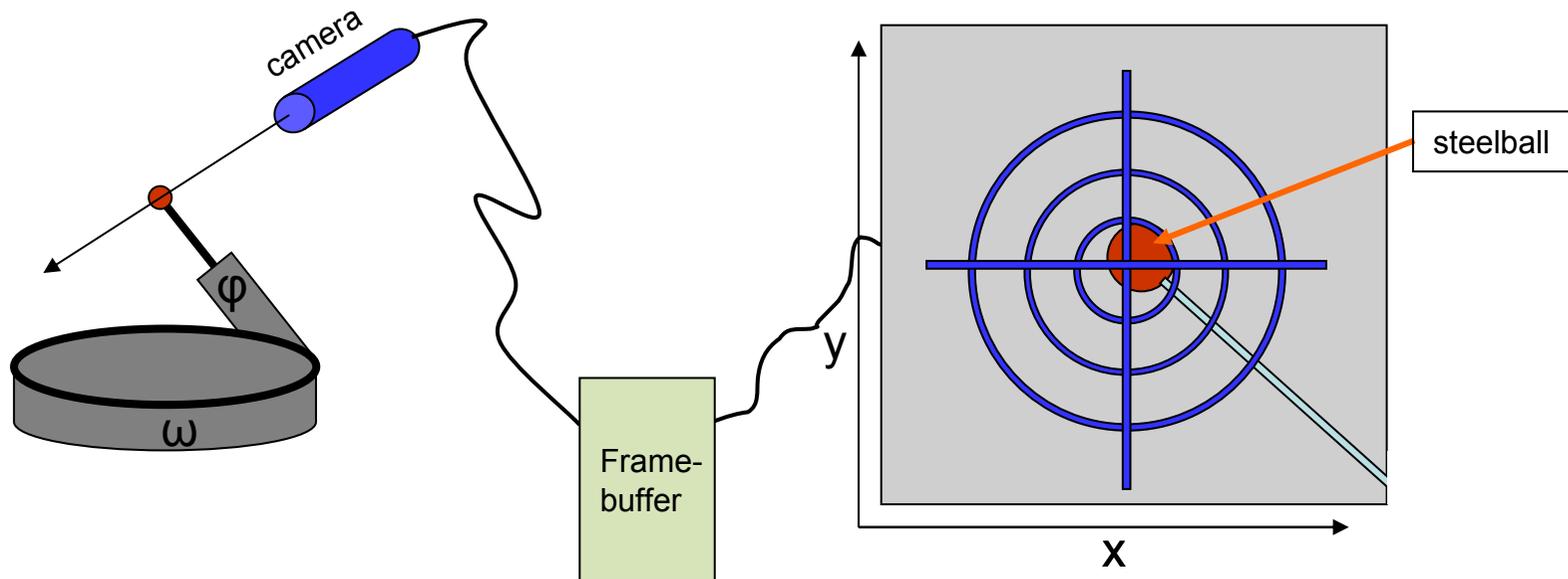


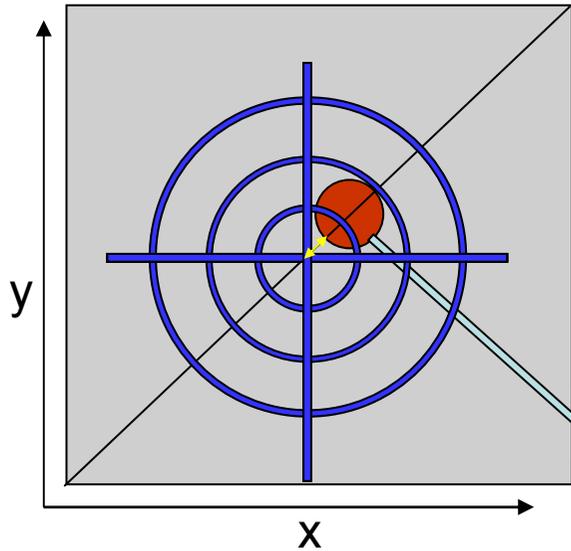
# Alignment of the crosshair for Bruker 3-circle goniometers

Daniel Kratzert  
dkratzert@gmx.de

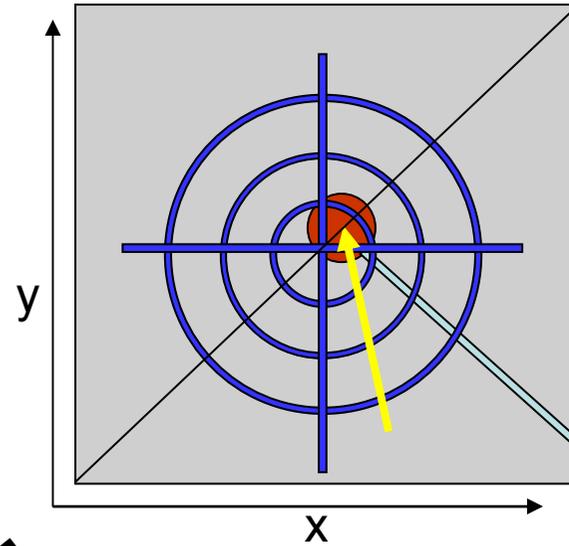
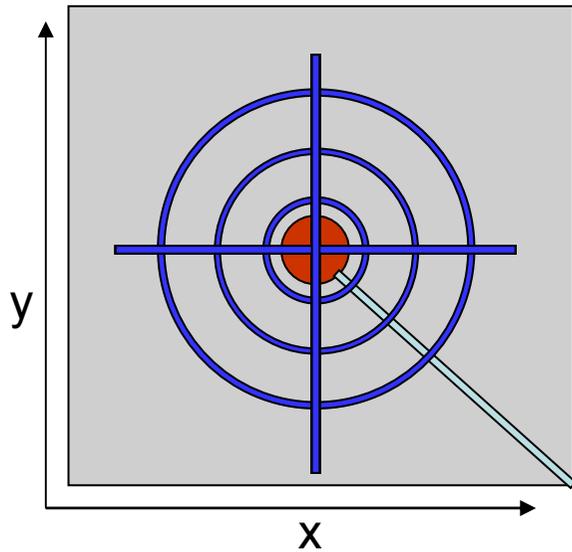


1. Center at position 'right':
  - bring the steelball to the center, rotate  $\varphi$  in  $90^\circ$
  - bring steelball to the center again
  - rotation of  $\varphi$  in  $180^\circ$  shows misalignment of the beamcenter (diagonal aberration from origin)

2. Determination of the new origin:



adjust the steelball half way to the center



use tools --> options --> select origin  
to select the new origin in the center  
of the steelball.  
(**only** in diagonal direction,  
lower left to upper right)



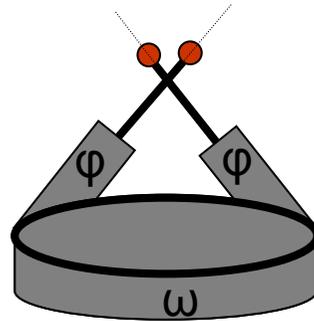
repeat step 1.

Now the steelball should be  
centered at position 'right'.

(otherwise repeat step 2.)

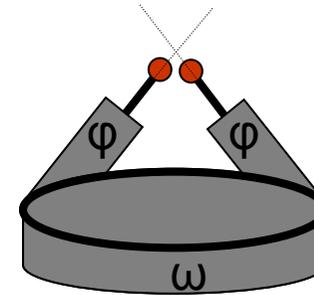
3. Drive to 'left' position to align the height.

the height is now either

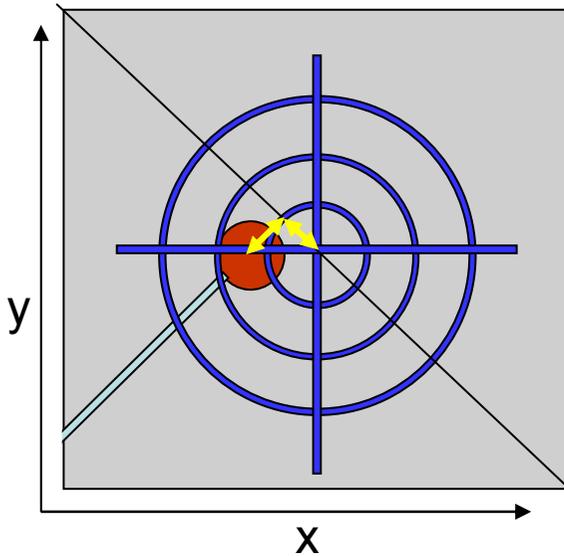


too high

or



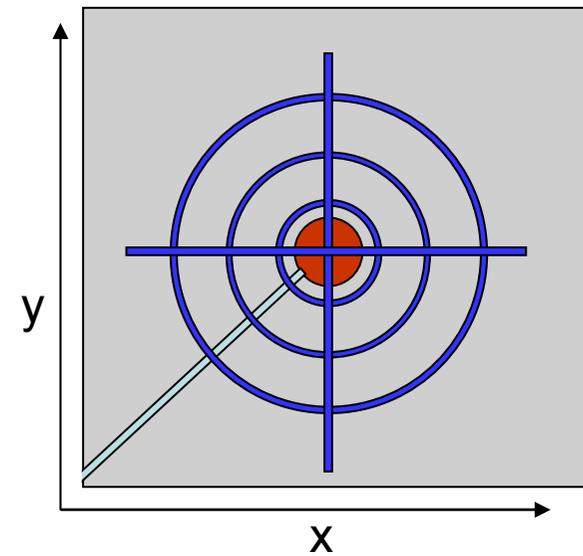
too low



- adjust the height to position the center of the steel ball on the diagonal (upper left to lower right)

- set the origin along the diagonal to bring the steel ball to the center

- check the centering by repeating step 1.  
(eventually do a second pass)



Some additional hints:

- You can go to the options menu and add 54.74 in the field 'TILT box'. This will give you a crosshair with the right diagonals for the alignment.
- When you have changed the origin of the crosshair in the Video program, you must use the 'File\Exit' command to properly exit from the Video program and save the video.ini file. If you close the Video program using the 'X' in the upper-right corner of the window, the origin is not saved.
- The video.ini file is read when the movie is taken for Crystal Face indexing.
- The video.ini file is located in c:\Program Files\Bruker AXS\Video\video.ini

