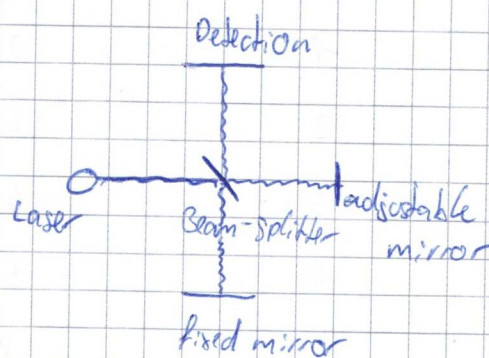


27.04.23

Calibration of screw

$\lambda = 632,8 \text{ nm}$

	Ring count	distance	start point 7,0
1	20	6,93 6,93	
2	20 21	6,86 6,86	
3	20 22	6,79 6,79	
4	23	6,72	
5	24	6,65	
6	25	6,57	
7	26	6,49	
8	27	6,40	
9	28	6,32	
10	29	6,23	



Screw was used to change the distance, change in interference fringes was recorded together with supposed distance change

Measuring refraction index of air

measurement	Ring count	pressure [mbar] $\pm 20 \text{ mbar}$
1	5	- 160
2	4	- 300
3	4	- 420
4	2	- 500
5	2	- 570
6	2	- 620
7	1	- 660
8	2	- 720
9	1	- 750
10	1	- 780

instead of the mirror changing, a chamber was placed in one arm and the pressure was changed

refraction parameter of glass

glass thickness: 0.5355 cm

a glass pane was turned to change the thickness for the light.

measurements	angle $\pm 1^\circ$	Ring count	
1	$0 \pm 2^\circ$	4	
2	$2 \pm 4^\circ$	14	
3	$4 \pm 6^\circ$	21	
4	$6 \pm 8^\circ$	34	
5	$8 \pm 10^\circ$	30	\times
6	10 to 8	32	
7	8 to 6	42	
8	6 to 4	31	
9	4 to 2	14	
10	2 to 0	7	2nd account ↓
11	$-8 \pm -7^\circ$	10	1 17
12	$-7 \pm -6^\circ$	14	1 17
13	$-6 \pm -5^\circ$	17	
14	$-5 \pm -4^\circ$	13	
15	5 to 4	13	
16	$-4 \pm -3^\circ$	15	