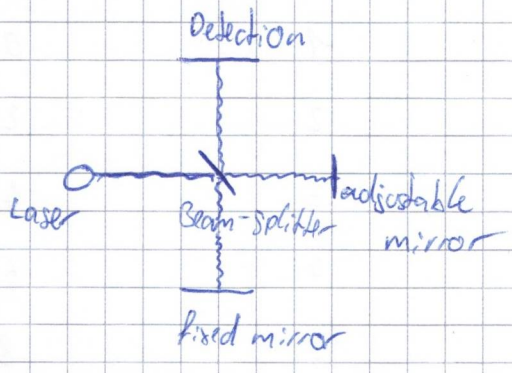
27.04.23

Calibration of skrew

$\lambda = 632{,}8$ nm

start point 7,0

	Ring count	distance
1	20	6,93
2	21	6,86
3	22	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] ±20 mbar	
1	5	-160	
2	4	-300	instead of the mirror changing, a chamber was placed in one arm and the pressure was changed
3	4	-420	
4	2	-500	
5	2	-570	
6	2	-620	
7	1	-660	Chamber Length: 37,50(5) mm
8	2	-720	
9	1	-750	
10	1	-780	

refraction parameter of glass

glass thickness: 0,535 cm

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

measurements	angle ±1°	Ring count	
1	0 to 2°	4	
2	2 to 4°	14	
3	4 to 6°	21	
4	6 to 8°	34	
5	8 to 10°	30	x
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 measurement
11	-8° to -7°	10 / 17	
12	7° to 8°	14 / 17	
13	-7° to -6°	17	
14	6° to 7°	13	
15	-6° to -5°	13	
16	5° to 6°	15	