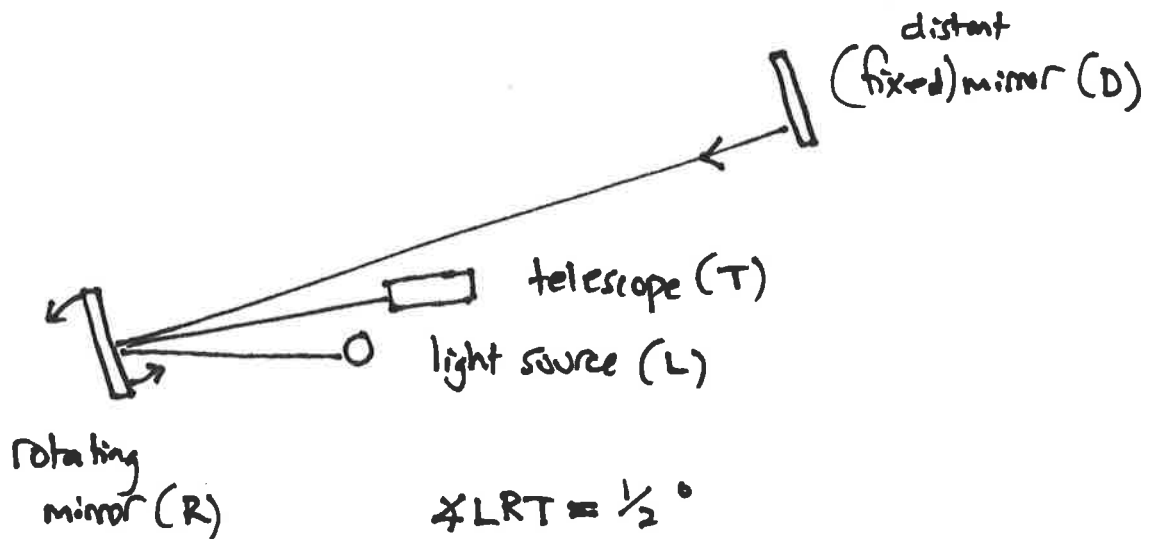


ASG vol 3 Ex 30.2 (Foucault & the speed of light)



$$\angle LRT = \frac{1}{2}^\circ$$

$$\angle LRD = 1^\circ$$

$$RD = 300\text{m}$$

If $C = 210,000 \text{ km/sec}$ (as measured by Römer),
then it will travel $300 + 300 = 600$ meters in
 $2.86 \mu\text{seconds}$.

For the rotating mirror to spin $359\frac{1}{2}^\circ$ in this
time, it must be spinning at a rate 2.2×10^6 radians/sec.
This amounts to $350,000$ revolutions/second or

21 million r.p.m.