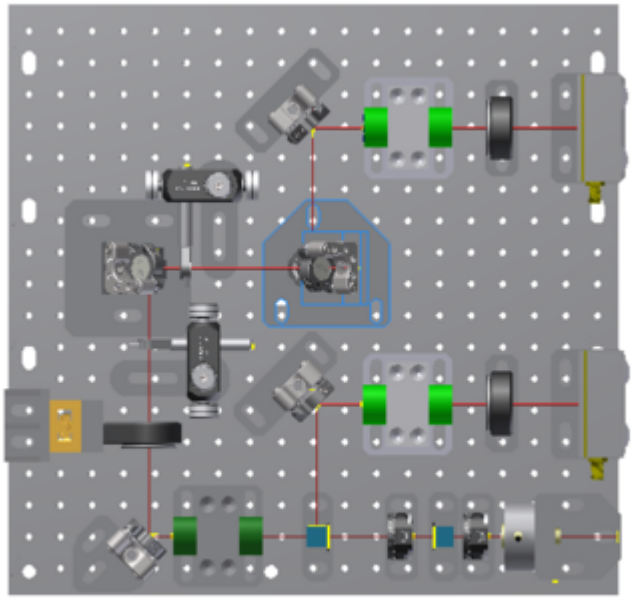
# Incoupling breadboard

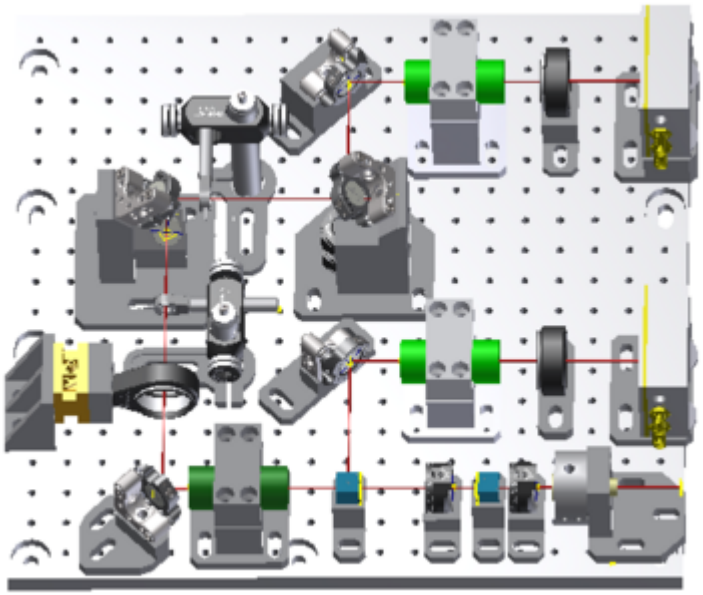
2D Drafts of the mounts
Alle Dokumente befinden sich im AFS unter: \\AFS\.iqo.uni-hannover\projects\magnesium\Projekte\PTB Ultrastable laser\PTB Files\Breadboard
Breadboard: M4-Löcher im Abstand von 15 mm
Strahlhöhe: 29 mm (zu Beginn) Anforderungen:

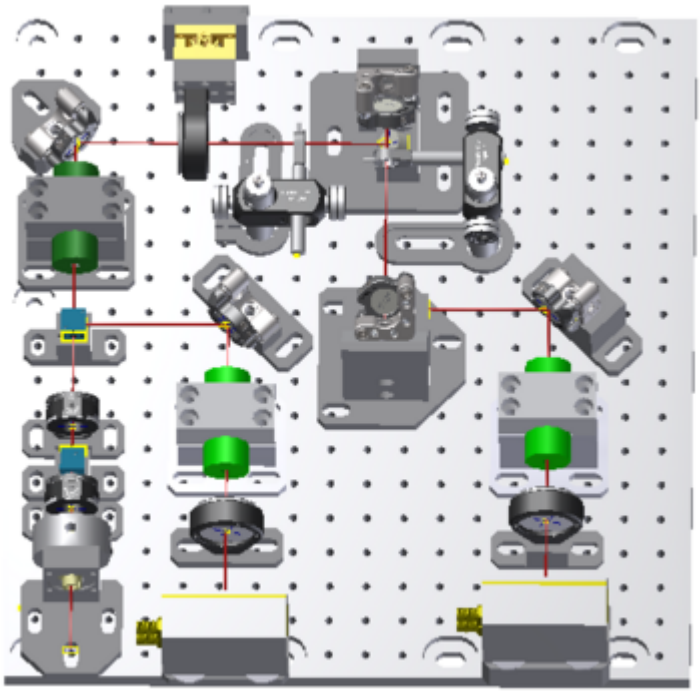
- jedes Element verschiebbar, sodass keine Reflexe zurück ins System reflektiert werden
- Mode Matching Linse auf einer Linear Stage, damit der Fokus direkt auf den ersten Spiegel fokussiert werden kann
- zwei Blenden zur Justierung des Laserstrahls
- jeder Halter individuell angepasst auf das Breadboard
- Isolatorhalter: speziell mit Dreipunktlagerung
- Halter: zur Dreipunktlagerung auf Unter
- Winkel bei den Spiegeln wurden nicht größer als im Datenblatt vorgeschrieben gewählt

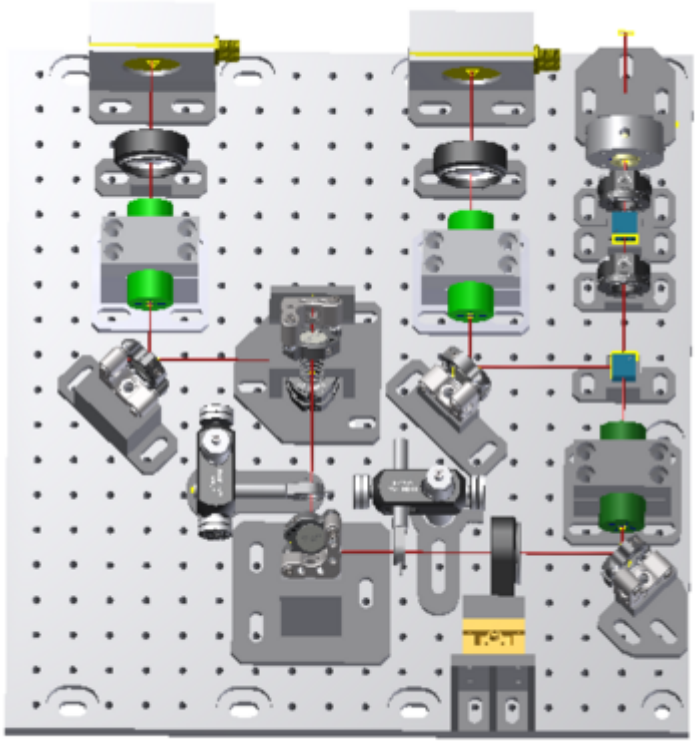
## Version 5

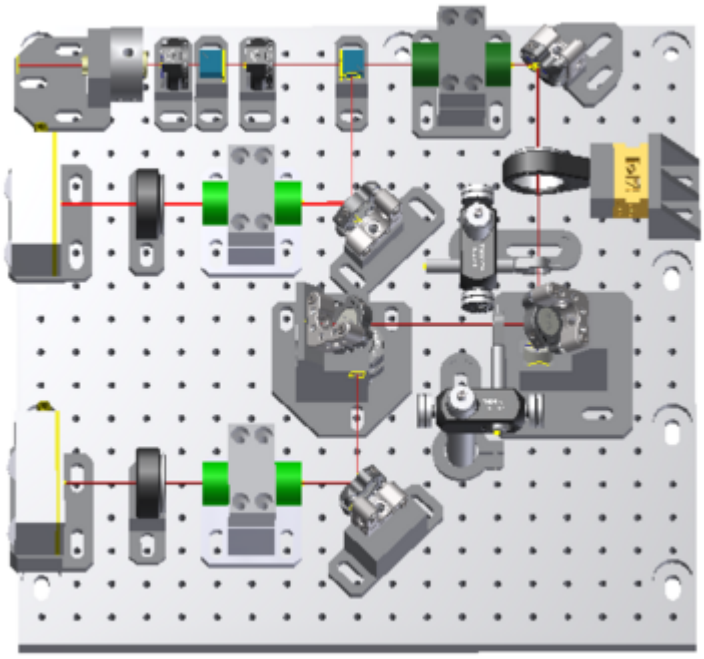
- two Waveplates can be mounted, so that the polarisation can be adjusted direktly in front of the cavity
- “light-elevator”
- the right PDs were used (PTB)







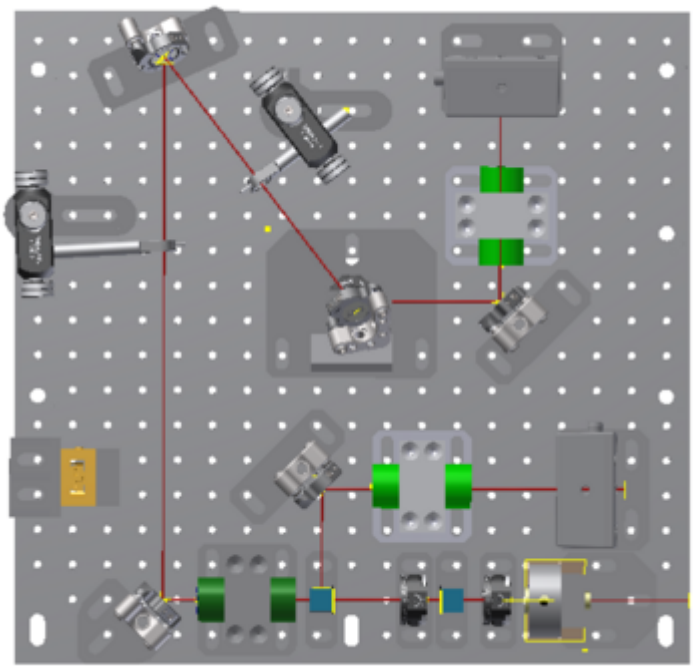


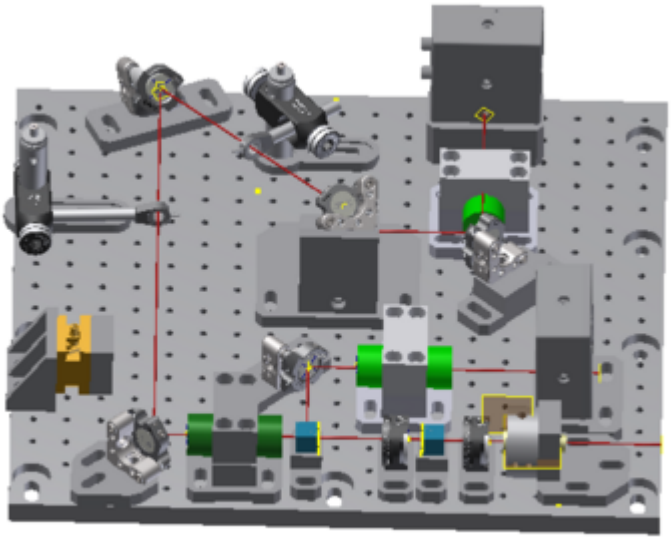


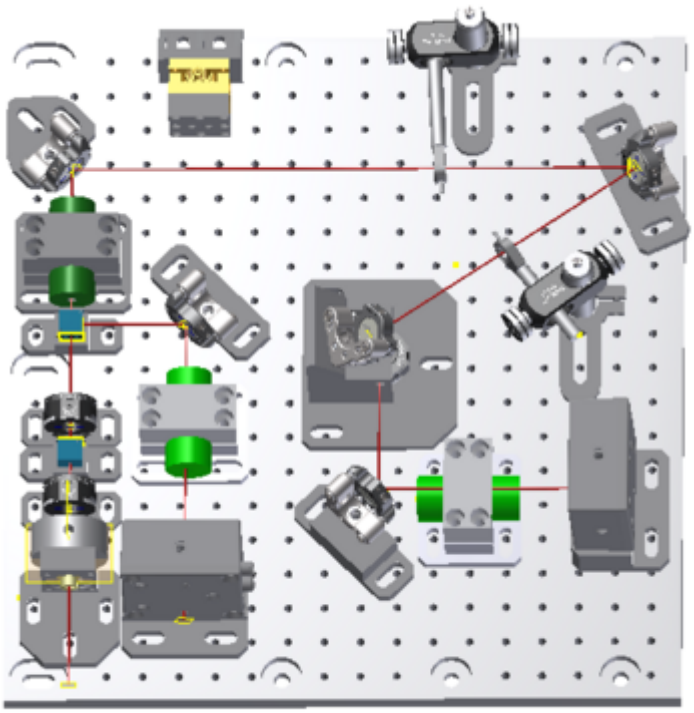
# Version 4

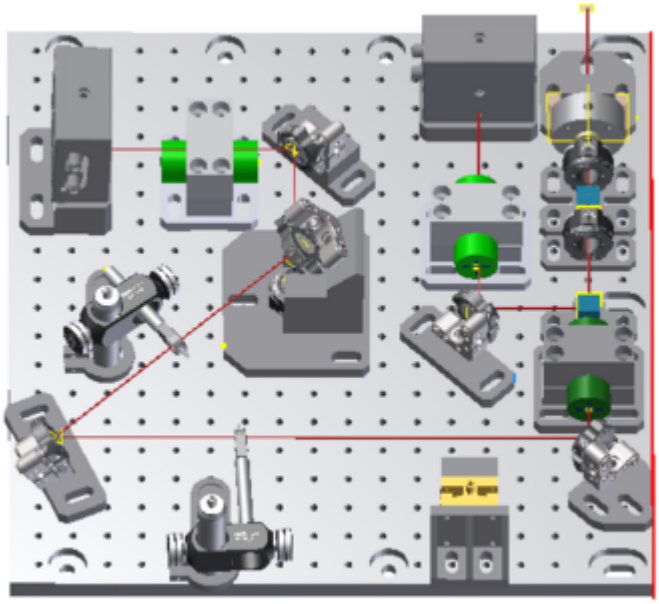
- sending light upwards is not good, “elevator” is better
- PDH-PD and RAM-PD: good, that there is the possibility to place isolators in front of them if they are needed
- Breadboard bigger for more space

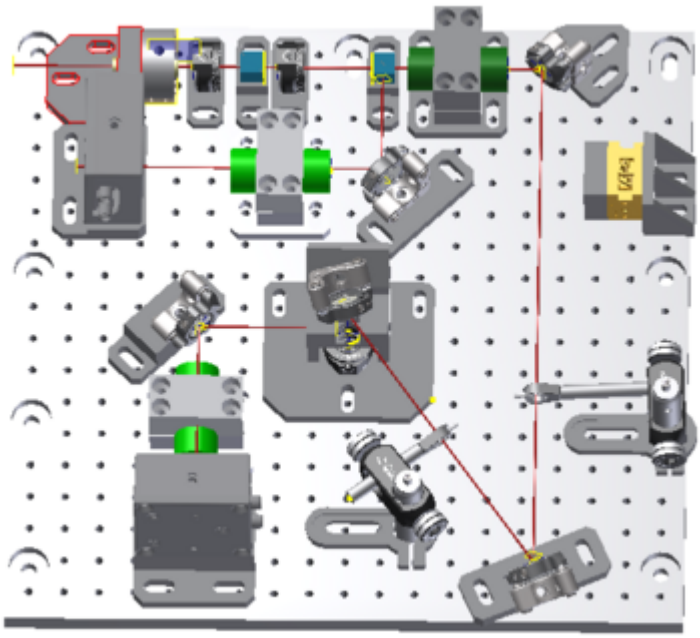
- Vakuum-ground can be connected to vakuum-top by the breadboard





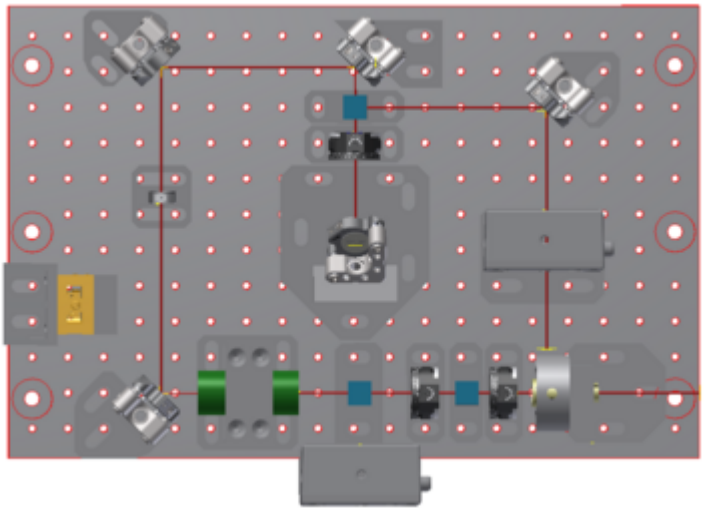


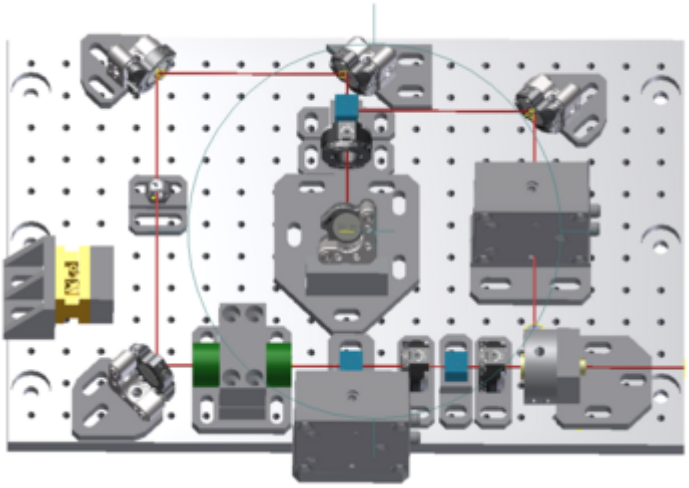


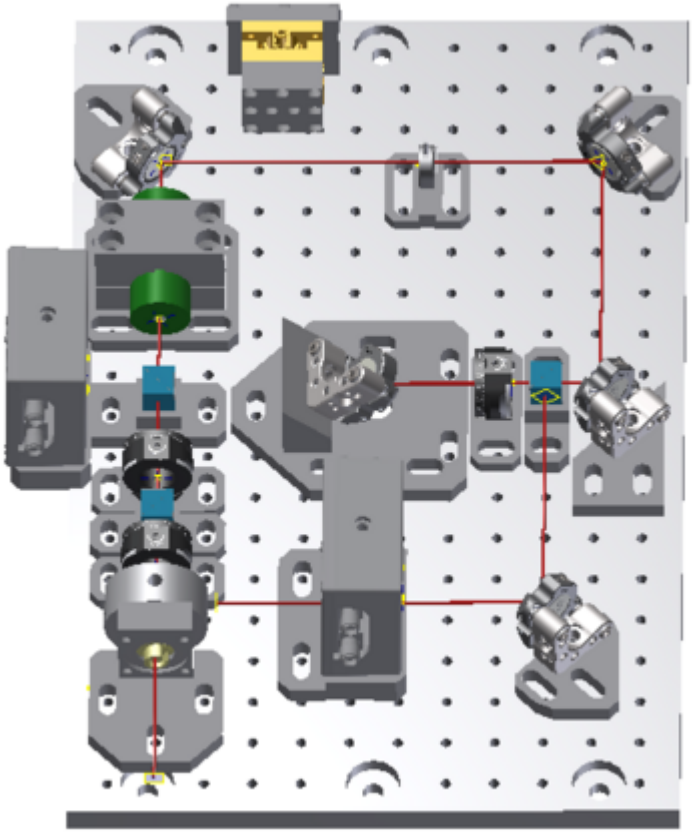


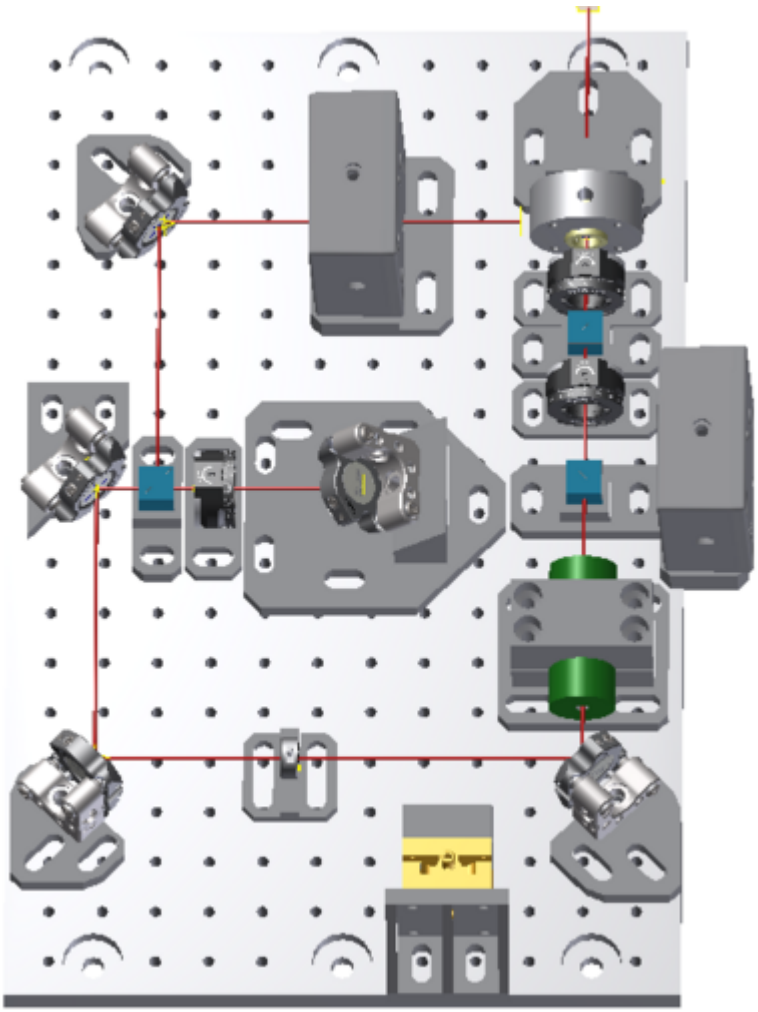
# Version 3

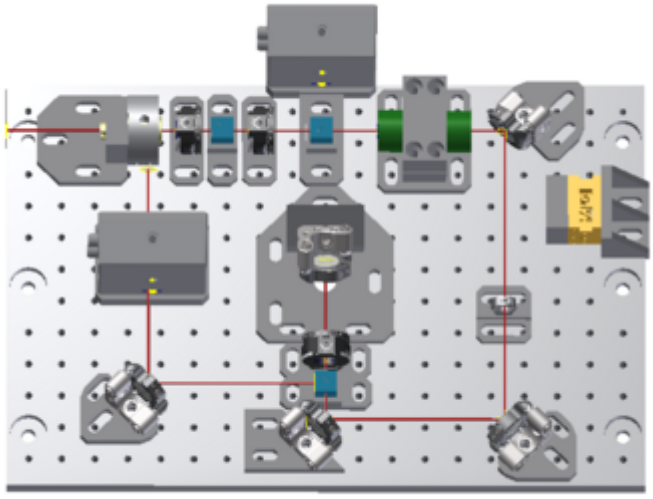
- RAM-PD: no mirror in front of it for adjusting the laser beam



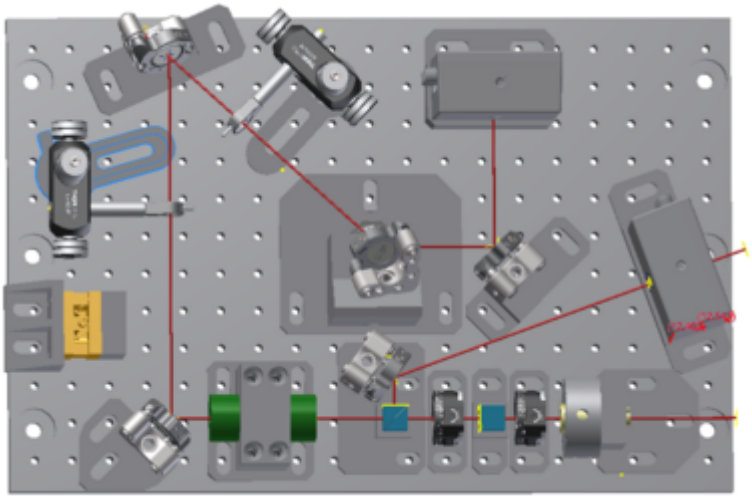


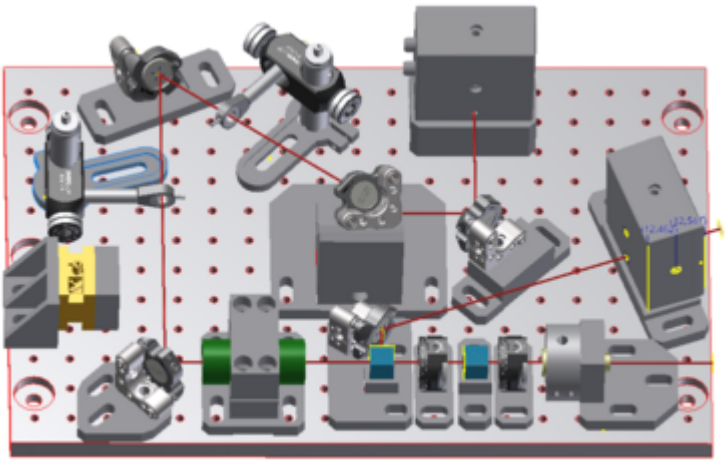


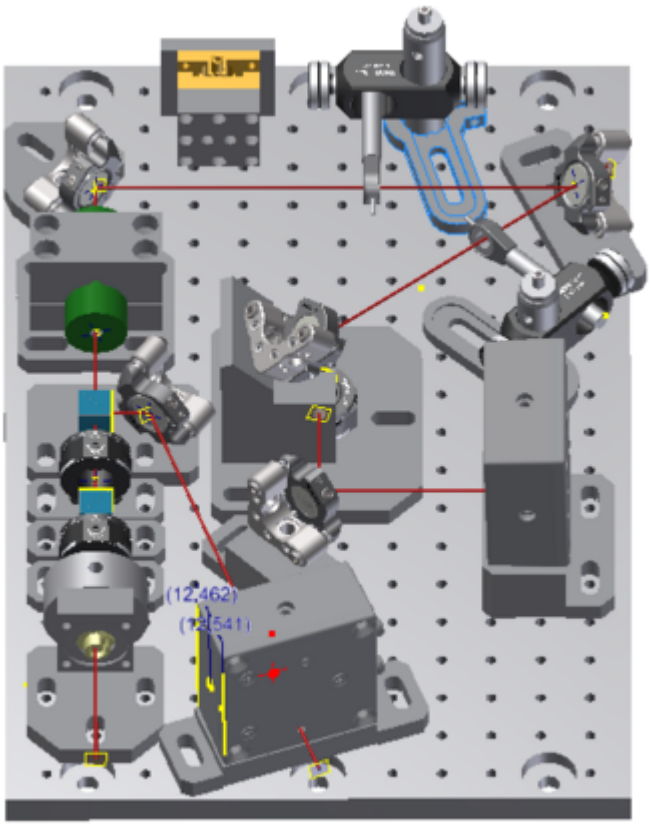




# Version 2



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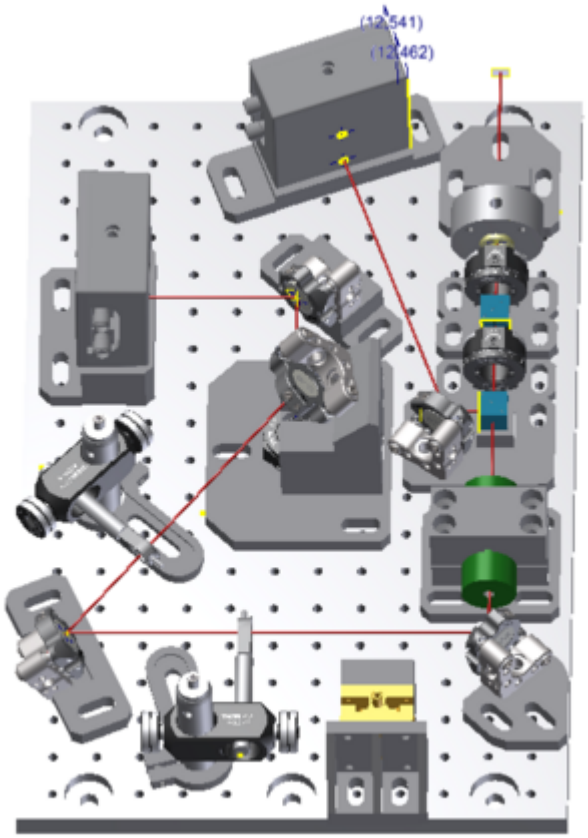

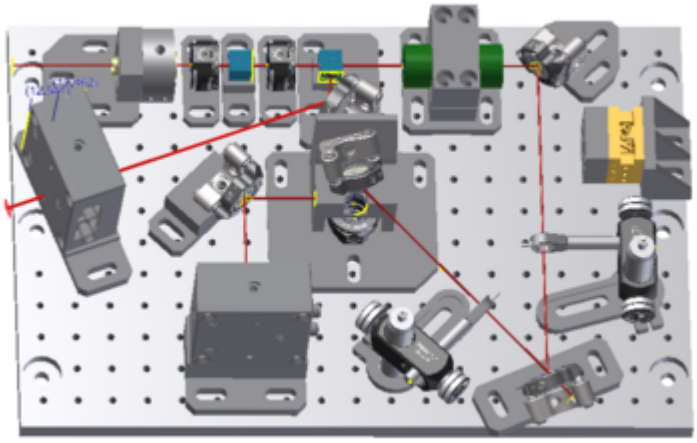

# Version 1

- optical components were missing (cubes for adjusting the light)
- PDH and RAM-diode shouldn't be positioned after the same cube, so that they don't influence each other. So te RAM-diode was positioned direktly before the isolator