

P4766: INVESTIGATION OF ZEEMAN STATE-TO-STATE COLLISION-INDUCED TRANSITIONS IN NITRIC OXIDE USING TWO-COLOR POLARIZATION SPECTROSCOPY

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- Motivation: Gain insights into the collision dynamics between NO and He, Ar and N₂
- Why TCPS? TCPS provides depolarization rate of the molecule during collision, which is a key parameter for collision induced transfers
- Key findings:
 - Our results show that collision induced transitions are strongest when NO collides with atoms/molecules with smaller atomic/molecular weights
 - Our model verifies that spin-flip transition is less significant at higher rotational level
- In conclusion, TCPS is a very powerful tool for investigating collision-induced Zeeman state-to-state transfer

