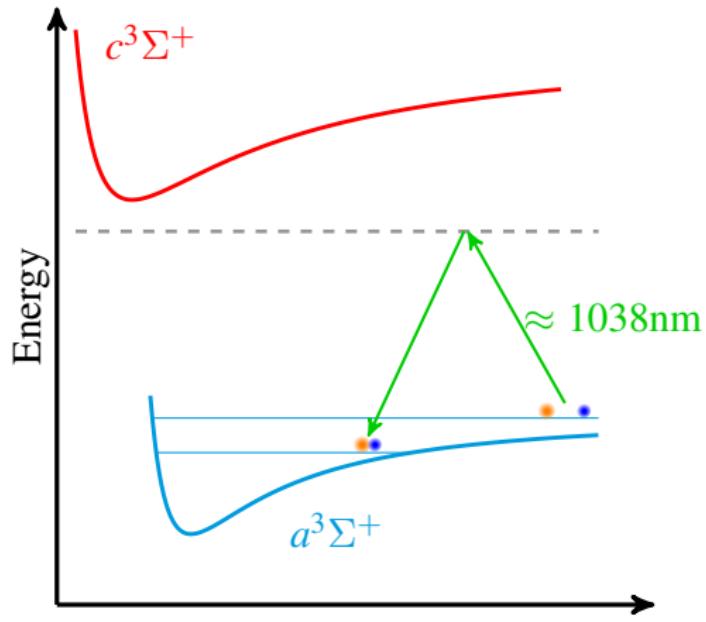


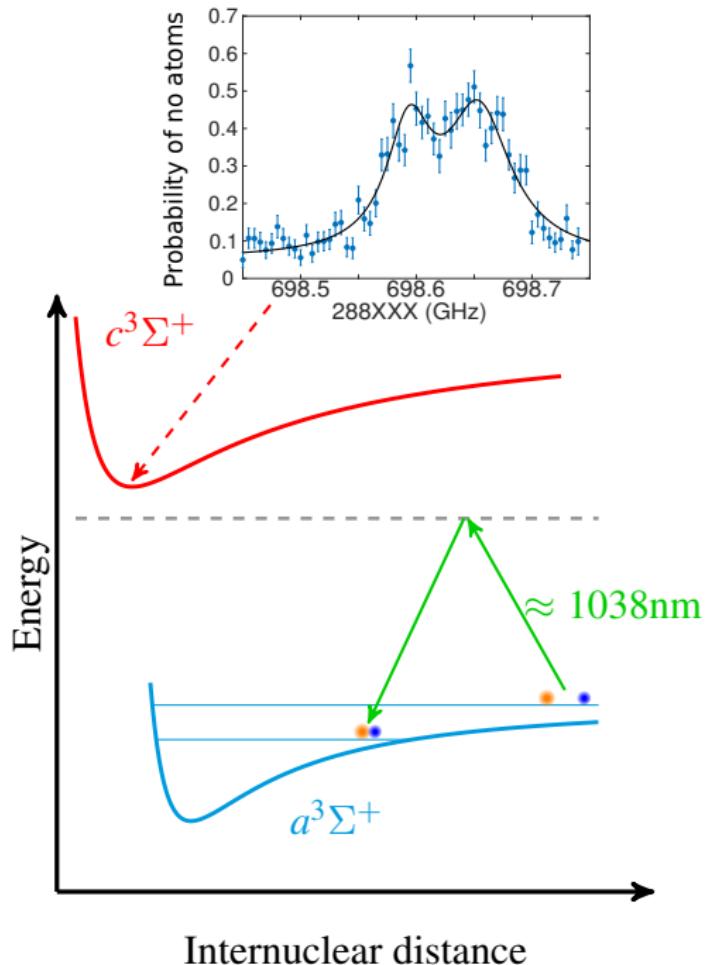
# NaCs lab update

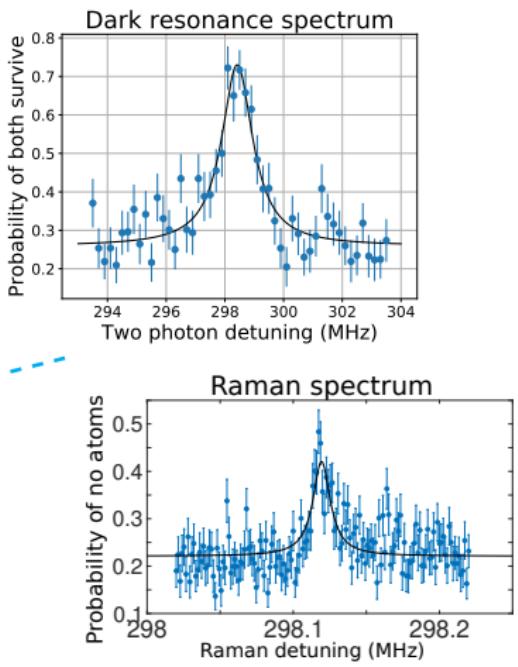
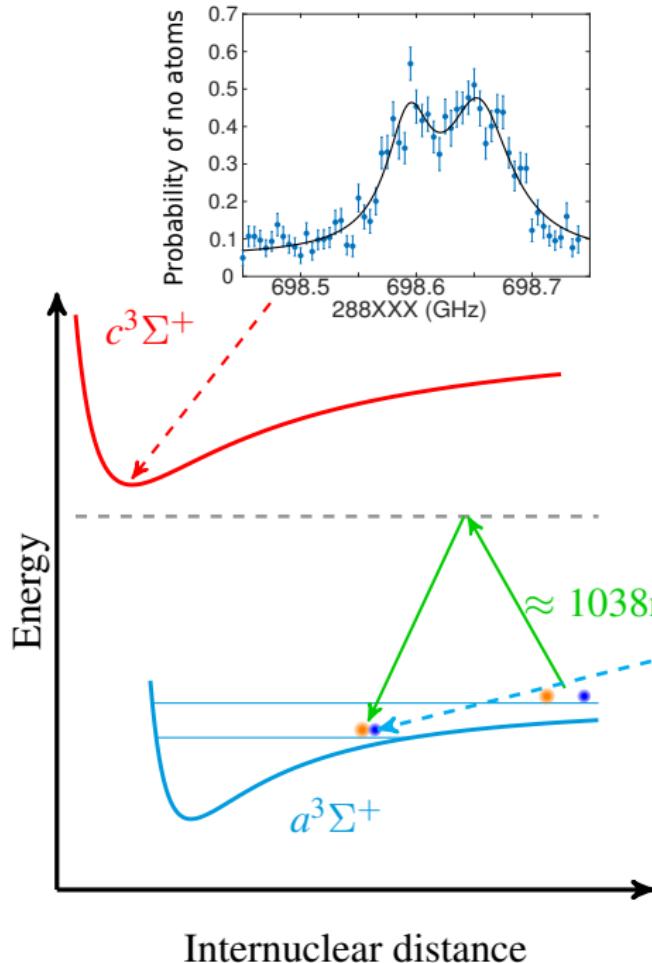
Yichao Yu

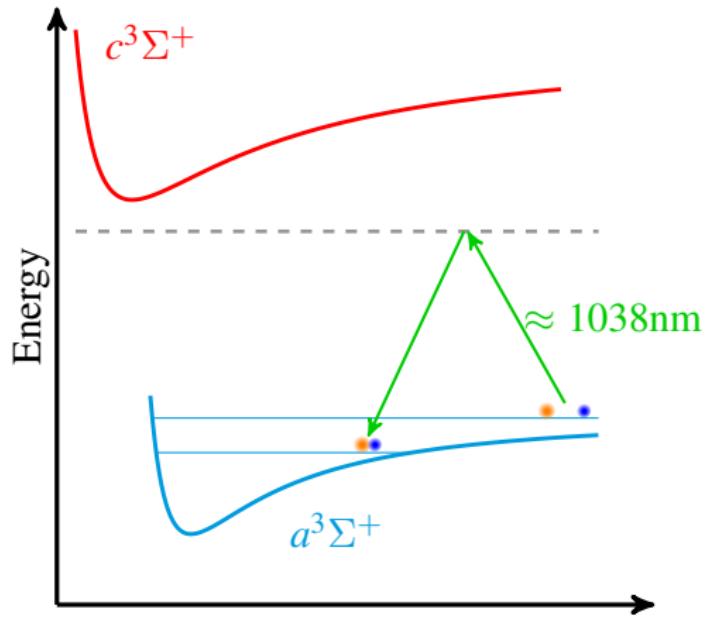
Ni Group

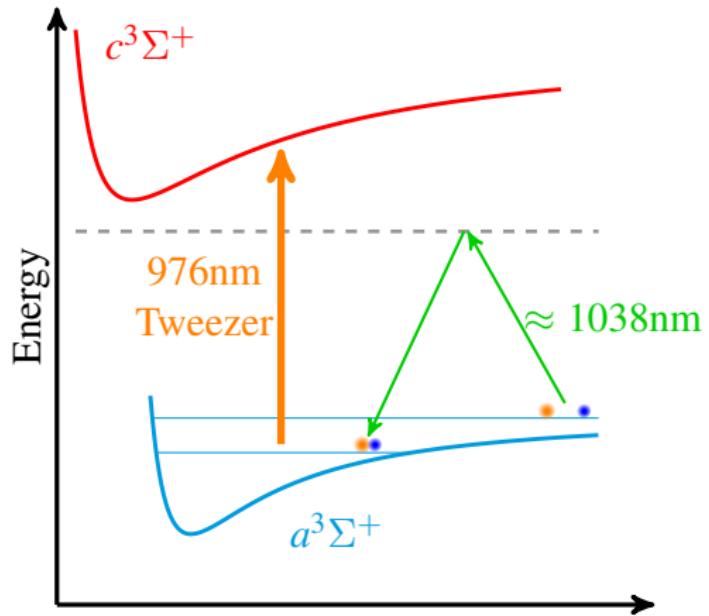
Sep. 28, 2018









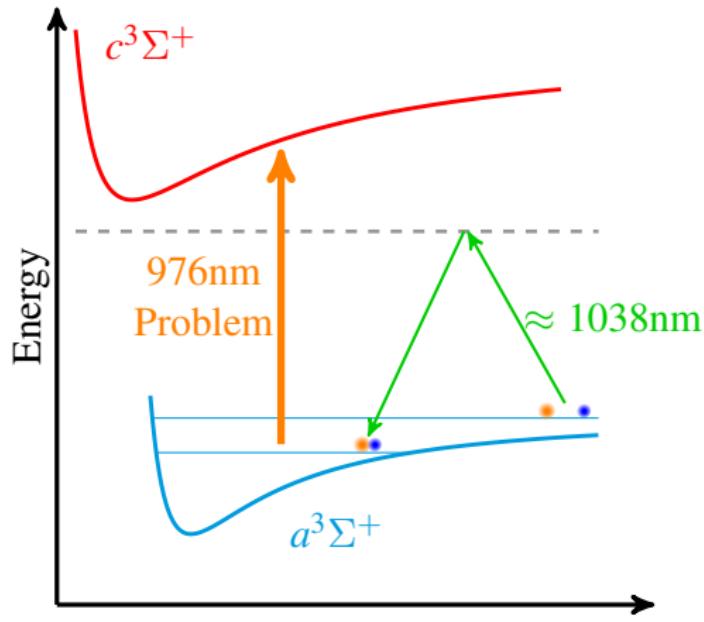


**1038nm:**

Power: 10mW  
Size:  $12\mu\text{m}$

**976nm:**

Power: 15mW  
Size:  $0.7\mu\text{m}$



**1038nm:**

Power: 10mW

Size:  $12\mu\text{m}$

Rabi frequency:  $\approx 100\text{Hz}$

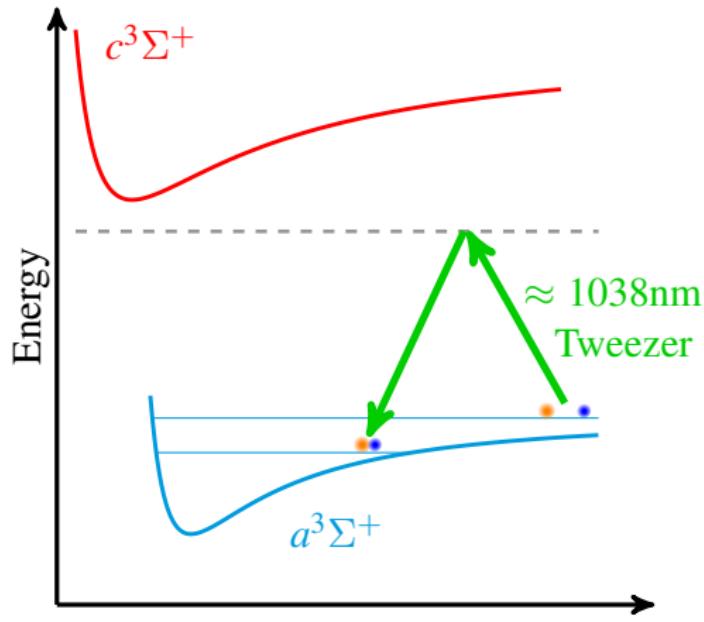
**976nm:**

Power: 15mW

Size:  $0.7\mu\text{m}$

Stark shift: 300kHz

Scattering:  $\approx 10\text{kHz}$



**1038nm:**

Power: 15mW

Size:  $0.7\mu\text{m}$

Rabi frequency:  $\approx 3\text{kHz}$

Stark shift:  $\approx 200\text{kHz}$

Scattering:  $\approx 160\text{Hz}$

(at  $\delta = -100\text{GHz}$ )

- New laser
- New beam path
- PA on deeply bound state
- Lesson about mirror mount

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