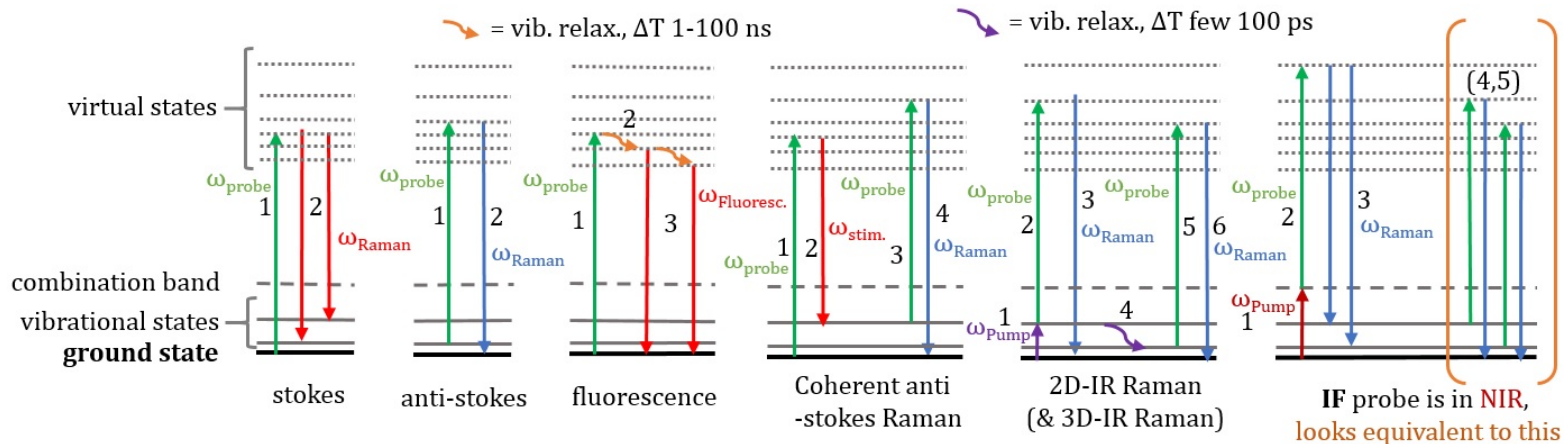


# THE INCORPORATION OF MULTI-DIMENSIONAL SPECTROSCOPIC TECHNIQUES IN THE FUTURE OF PLANETARY SCIENCE

Christopher J. Bennett<sup>1</sup>, Mihai Vaida<sup>1</sup>, Robert Peale<sup>1</sup>, Dan Britt<sup>1</sup>, Amanda Stockton<sup>2</sup>



PPM DETECTION  
PPB-PPT WITH SERS

DETECT VOLATILES —  $\text{O}_2$   
ORGANICS/MINERALS  
ISOTOPES H/D,  $^{13}\text{C}$ ,  $^{18}\text{O}$

UNAMBIGUOUS MOLECULAR IDENTIFICATION

COMPATIBLE WITH  
MICROFLUIDIC DEVICES  
(E.G., CHIRAL BIOMARKERS)

