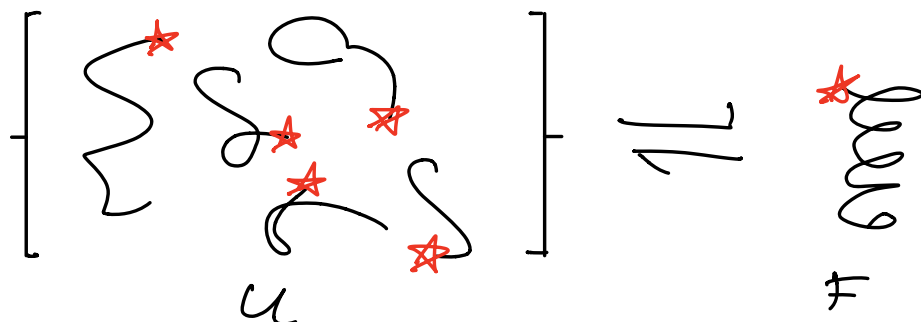
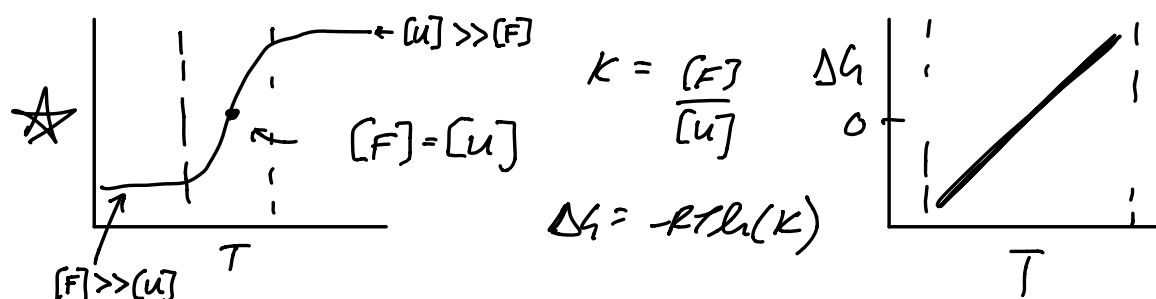


10/2/2019



SPECTROSCOPY \rightarrow WATCH IT HAPPEN



$$G = H - TS \quad \left(\frac{\partial H}{\partial T} \right)_V = C_p \quad S = \frac{q_{\text{rev}}}{T}$$

HOW CAN WE TRANSLATE THIS KIND OF STUFF \uparrow
INTO INSIGHTS ABOUT MECHANISM?

BACK A STEP: WHAT DOES THIS STUFF EVEN MEAN?

NEXT 3 CLASSES:

- DEVELOP COMMON LANGUAGE AND FRAMEWORK FOR STUDYING REACTIONS
- START **MICROSCOPIC** (WHAT ARE MOLECULES DOING) AND THEN GO **MACROSCOPIC** (WHAT CAN WE OBSERVE).

KEY THEME: WE ALWAYS DEAL WITH **POPULATIONS** OF MOLECULES. WE NEED A **STATISTICAL** VIEW.