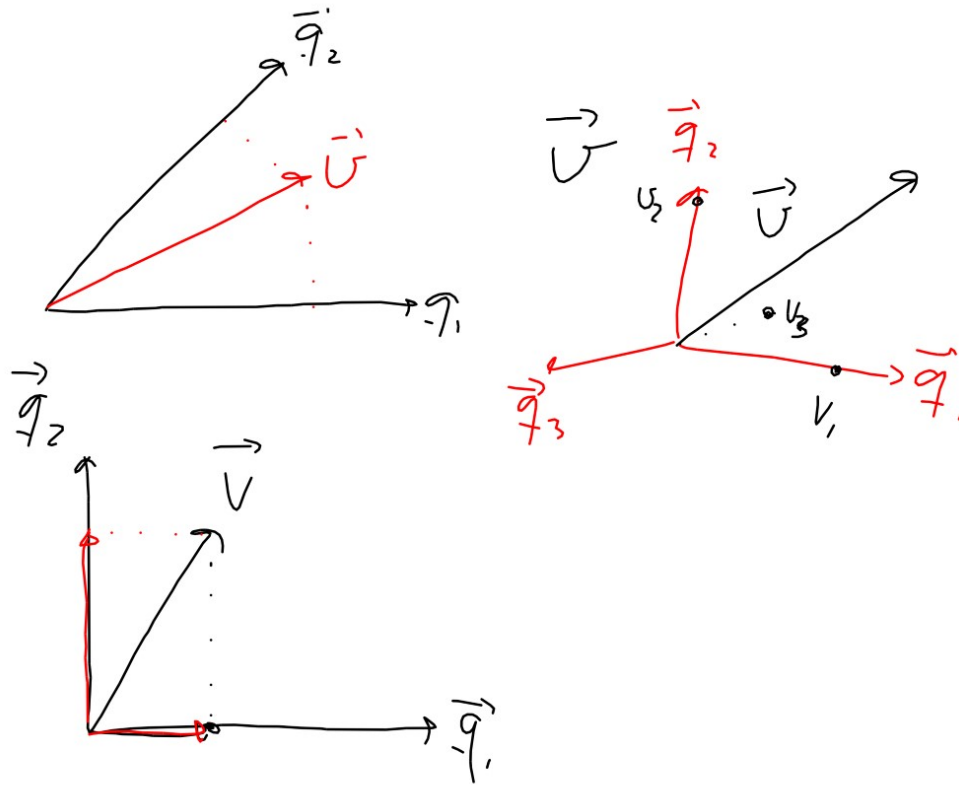


F15/

Oral exam: 12. Dec & 16. Dec.

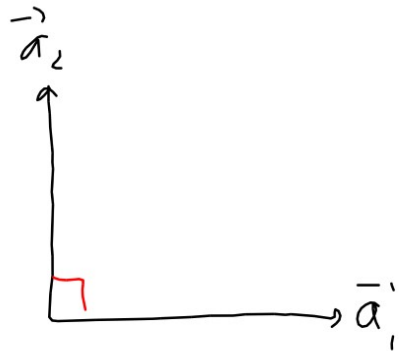
We are using classroom 301 (regular one)

Pensum is all up to INS. Everything
written on the whiteboard



$$\vec{U} = v_1 \vec{q}_1 + v_2 \vec{q}_2 + v_3 \vec{q}_3$$

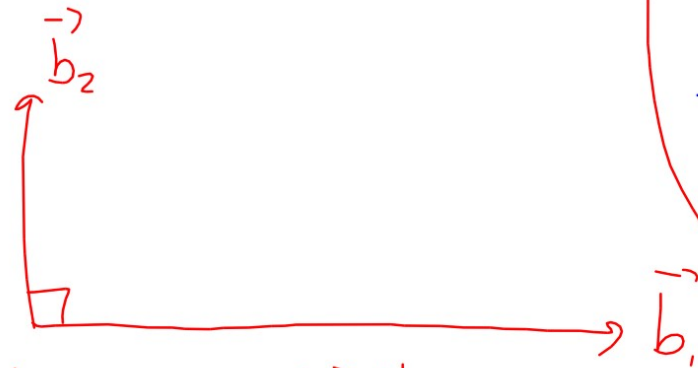
$$\underline{U}^T = \begin{pmatrix} v_1 \\ v_2 \\ v_3 \end{pmatrix}$$



$$\|\vec{a}_1\| = \|\vec{a}_2\| = 1$$

$\{a\}$ is orthonormal

$$P_q^p = \begin{bmatrix} q_1^p & q_2^p & q_3^p \end{bmatrix}$$



$$\|b_1\| = 1, \|b_2\| \neq 1$$

$\{b\}$ is orthogonal

$$\underline{y}^q = A^p \underline{x}^q$$

$$\underline{y}^q = \underbrace{C_p^q A^p C_q^p}_{A^q} \underline{x}^q$$

$$\underline{x}^a = C_b^a \underline{x}^b \quad \underline{y}^b = C_b^a \underline{x}^a$$

