MSO 203B-PDE (Canonical Form - Lecture 13) Aum + Bung + Cuny + Dun+ Eug + Fu=G - 0 Based on B-4AC we know the mature of the eggs $\exists (249) \mapsto (5(249), 1(249)) \text{ and define } \omega(517): 24(249)$

$$\widetilde{A}W_{33} + \widetilde{B}W_{37} + \widetilde{C}W_{m+}\widetilde{D}W_{3} + \widetilde{E}W_{7} + \widetilde{F}W = \widetilde{G}$$

$$\widetilde{A} = AG_{n}^{2} + BG_{n}G_{7} + CG_{7}^{2}$$

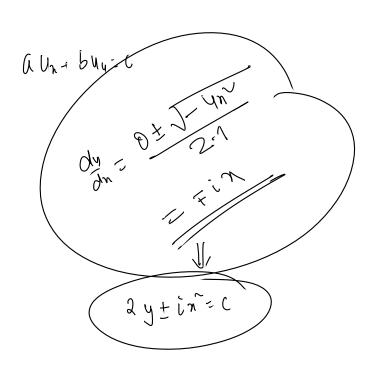
Gaze 3: Given
$$\overrightarrow{B}$$
-4xC<0=) \overrightarrow{B} -4 \overrightarrow{A} \overrightarrow{C} <0.

Change \overrightarrow{B} :0: \times \overrightarrow{A} : \overrightarrow{C}

$$2AS_{1}n_{1}+B(S_{1}n_{1}y+n_{1}S_{y})+2Cn_{y}S_{y}=0$$
. $\longrightarrow 3 \times i$
 $A(S_{1}^{2}-n_{1}^{2})+B(S_{1}S_{y}=n_{1}n_{y})+C(S_{1}^{2}-n_{1}^{2})=0$ $\longrightarrow 4$

$$A\theta_n^2 + C\theta_1^2 + B\theta_n\theta_y = 0$$

This given in two complex (distinct) curves along which 0 is constant



 $2\left(s_{h}\eta_{h}+\eta^{\vee}s_{h}\eta_{y}\right)=0\qquad --- \otimes$

Define
$$w(q_1\eta) := u(x_1y)$$

(anonical Form $w_{qq} + w_{\eta\eta} + 2[w_{q\eta}w_{\eta}, w_{\eta}^{2}, \eta] = 0$
 $u_{\eta} := w_{q} q_{\eta} + w_{\eta\eta} q_{\eta} + w_{$

Ib mean Dis constant along 2y + in = C". Ohower & (xin) = 2y & n(xin) = x2 3x = 0; 3nx = 0; ny = 0; ny

$$\frac{42^{3} w_{33} + 42^{3} w_{11} + 2w_{1} = 0}{33 + w_{11} + \frac{w_{1}}{2\eta} = 0}$$

From 102: