

*Proof.* Let  $C_t$  be the crossing point of two tangents  $p_1$  and  $p_2$ .

Then,  $\sum_i (q_i - C_t) \wedge p_i = 0$ ,

$(q_1 - C_t) \wedge p_1 = 0$  and

$(q_2 - C_t) \wedge p_2 = 0$ .

$\therefore (q_3 - C_t) \wedge p_3 = 0. \quad \square$