Vu Thanh Tung

## May 23, 2020

**Theorem.** Let  $P_1, U_1$  be the isogonal conjugates of two different points P, Uwith respect to  $\triangle ABC$ . Suppose that  $P, U, P_1, U_1$  are all finite points and that P and  $U_1$  are distinct. Let A' be the point, other than A, that circle (APU) and  $(AP_1U_1)$  intersect. Define B', C' cyclically. Then three lines AA', BB', CC' are concurrent.



Vu Thanh Tung, 250 Quang Trung, Nam Dinh city, Vietnam *E-mail address:* tungvtt@gmail.com