The Tie Theorems

Krutovskiy, Roman

Theorem. There are general position points A, B, C, P on the projective plane. Let A_P be the intersection point of lines AP and BC. Analogously define B_P and C_P . Take any points A_1, B_1, C_1 on AP, BP, CP, respectively. Let WC be the intersection point of A_1B_P and B_1A_P. Analogously define points WA and WB. Then lines CW_C, AW_A and BW_B pass through one point. I also generalized this theorem and found interesting related properties. I found and proved all these theorems in this year.

Awards Won: