Involution curve





Involution curve first appeared in Reinout Quispel's Liber Amicorum. At the time not much was known about involution curves.

The starting point is a double base point of the quartic pencil depicted on the left. This is a point that is visited twice by every curve, and it can be used to define an involution, i.e., a map which brings you back where you came from if applied twice.

By a birational transformation each quartic curve was put into Weierstrass form. These are the cubic curves in the picture on the right.

The involution defined by double base point becomes an involution with an involution curve. The involution curve intersects each Weierstrass curve in a different involution point, which 'moves' from curve to curve.