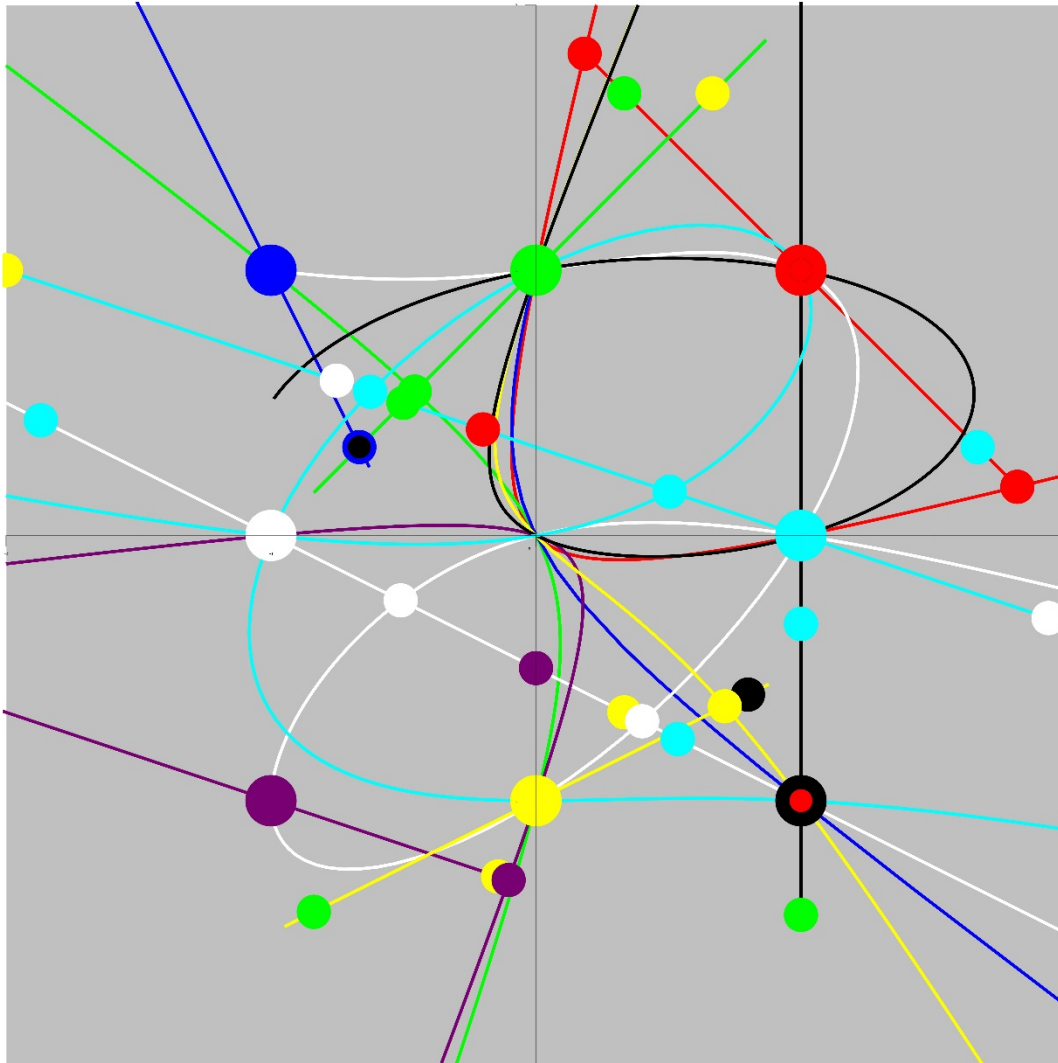


Study of the ninth



The ninth refers to the ninth point which is determined by eight points which lie on a cubic, see Eight implies nine. Study of the ninth investigates what happens to the ninth point (the centre) if one of the eight points (arranged on a square) moves over a straight line.

Each straight line has the same colour as the point which moves on it. The straight line ends when the ninth gets out of sight. The straight line continues (out of sight) when the ninth is still visible. Whenever the induced curve on which the ninth travels passes one of the other eight points, a point with the same colour is placed on the straight line.

It is remarkable that the ninth point visits many (but not all) of the eight points.

More can be said. For example, the blue straight line has a green point at infinity. And when the white point is infinitely near the black point, the ninth is infinitely near the red point. Also, when the black point is infinitely near the red point, then so is the ninth.

The constellation is as intriguing as the motion of celestial bodies in the sky due to gravitational interaction. Here, however, the cause is purely geometrical.