## The Bertini incidence



This work is dedicated to Rob Rostolis, who was the principal of Diamond Creek East Primary School for 27 years. The motto of the school, **Dedication**, **Care** and **Excellence**, would have been close to the heart of Eugenio Bertini, an Italian mathematician of marvellous character who lived from 1846 till 1933.

The Bertini incidence contains three curves, the black, the orange and the white. The orange and black curves are cubic curves. The white one is a quartic curve with a triple point, which is where the curve intersects (crosses) itself three times. The three curves intersect each other in several points. There are two special points where the white curve intersects either the orange or the black curve (not both). Incidentally, the straight line from those points to the triple point is tangent to (touches) the orange or the black curve.