

12. Péter Körtesi

Using GeoGebra to study the Famous Curves of the MacTutor History of Mathematics archive

We will study the Chapter Famous Curves of the MacTutor History of Mathematics archive, see: <http://www-history.mcs.st-and.ac.uk/Curves/Curves.html>. The GeoGebra software is suitable to represent both the set of functions, and the so called associated curves, like evolutes, or involutes, and to experience their relation. The curves are given either in explicit, implicit, parametric or polar coordinate form, and we will explore the power of the software to visualize them. The osculating circle, tangents, normals, convex boundary of family of curves or Taylor series will be mentioned as well. The above mentioned Famous curves chapter is suitable as well to offer practical examples for students in applying GeoGebra, and their results can be valorized on the GeoGebra Tube, some of examples:

<https://www.geogebra.org/material/simple/id/1226675>

<https://www.geogebra.org/material/simple/id/1222515>

<https://www.geogebra.org/material/simple/id/jQNWkzhG>

<http://www.geogebra.org/m/CAm5xR6s>