

Envelopes in a CAS environment



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Definition: A 1-parameter family of plane curves is given. A curve tangent of all the curves in the family is called an **envelope** of the family



D. Hilbert (1900): "... who would give up ... the picture of a family of curves or surfaces with its envelope which plays so important a part in differential geometry, in the theory of differential equations, in the foundation of the calculus of variations and in other purely mathematical sciences? "