

Sederberg, Thomas W.

Applications to computer aided geometric design. (English) [Zbl 0885.68131](#)

Cox, David A. (ed.) et al., Applications of computational algebraic geometry. American Mathematical Society short course, San Diego, CA, USA, January 6–7, 1997. Providence, RI: American Mathematical Society. Proc. Symp. Appl. Math. 53, 67–89 (1998).

Summary: This lecture surveys some of the insights, algorithm enhancements, and practical new capabilities that algebraic geometry has contributed to the field of computer aided geometric design. Specifically, the lecture discusses new methods for finding the implicit equations of rational surfaces and planar rational curves, examines which curves that arise in modelling can be parametrized, and looks at some considerations when using algebraic methods in floating point arithmetic.

For the entire collection see [\[Zbl 0880.00039\]](#).

MSC:

- [68U07](#) Computer science aspects of computer-aided design
- [14Q05](#) Computational aspects of algebraic curves
- [14Q10](#) Computational aspects of algebraic surfaces

Cited in **7** Documents

Keywords:

[computer aided geometric design](#)