Open Questions in Particle Theory; Supercollider Physics; Symplectic Methods in Physics.

The concluding Author Index lists the 169 writers of the articles in Parts (2)–(5).

E. I.

7[41-06, 41A15, 65-06, 65D07, 65D10]—*Curves and surfaces in geometric design*, Pierre-Jean Laurent, Alain le Méhauté, and Larry L. Schumaker (Editors), A K Peters, Wellesley, MA, 1994, xvi + 490 pp., $23\frac{1}{2}$ cm, $69.95

Curves and Surfaces in Geometric Design is one of two books resulting from the June 1993 Conference on Curves and Surfaces held in Chamonix-Mont-Blanc, France. This book contains 58 research papers relating to Computer Aided Geometric Design. The other book, *Wavelets, Images, and Surface Fitting* [1], contains an additional 48 papers.

Computer Aided Geometric Design (CAGD) is the computer-assisted representation and analysis of shape. It draws upon such areas as approximation theory, differential geometry, optimization, mechanical CAD, and computer science. The 58 papers in this collection do a nice job in representing a large number of currently vital research topics. These range from theoretical concerns to properties of spline curves and surfaces to interpolation and approximation schemes to data structures and software approaches to use of CAGD techniques in specific applications. Although the papers are generally scattered throughout the subareas of CAGD, topics of current concern are well represented. For example, the book contains a number of research papers arising from minisymposia on software infrastructure, spline conversion, rational approximation, and constrained approximation.

While a few of the articles in *Curves and Surfaces in Geometric Design* are survey articles, the vast majority are research articles describing recent work. Most of the articles are fairly short—8 pages—so this is not a book for readers anticipating a detailed or leisurely exposition. Nor is it a book for readers desiring an introduction to CAGD, as most articles assume familiarity with terminology, basic results, and issues. What the book is, is a good collection of recent work by many of the foremost researchers in this area. Its strengths are its breadth, the generally high quality of the articles, and the important topics addressed. I recommend the book to anyone who is familiar with the basic issues in CAGD and desires to read about recent work.

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REFERENCES

1. P.-J. Laurent, A. Le Méhauté and L. L. Schumaker (eds.), *Wavelets, images, and surface fitting*, A K Peters, Wellesley, MA, 1994. MR **95f**:65010