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Book Review: *Scaling Phenomena in Disordered Systems*

Scaling Phenomena in Disordered Systems. R. Pynn and A. Skjeltorp, eds. Plenum Press, New York.

Scaling Phenomena in Disordered Systems contains the proceedings of a NATO Advanced Study Institute held in Geilo, Norway, in April 8–19, 1985. The unifying theme of the subjects discussed in the book is the concept of scaling, especially as arising from self-similarity under dilation, characteristic of the fractal geometry underlying disordered systems.

Many of the papers are contributions from invited speakers, often written in the form of reviews, and in a comprehensive pedagogical way. The theory of fractals and its application to scaling in disordered systems is thoroughly reviewed by authors including H. E. Stanley, R. F. Voss, and R. B. Stinchcombe. Topics covered include percolation and its transport properties, diffusion-controlled aggregates, spin glasses and Ising models, scaling in polymer science, and strange attractors and chaos. Valuable contributions are the various papers reporting the experimental studies of systems where, for example, diffusion-limited aggregation is actually observed, or of neutron, x-ray, and light scattering from aggregates and gels. The importance of these studies is acknowledged by the editors, who call for more "experimental activity if this field [of scaling phenomena in disordered systems] is to flourish."

In summary, *Scaling Phenomena in Disordered Systems* provides a wide cross section of the representative research in the field, both theoretically and experimentally. The Geilo meeting brought together an impressively large group of researchers, and the resulting proceedings consitute an excellent reference book.

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