1946 *Theory of Lie Groups*
Claude Chevalley

French mathematician Claude Chevalley had a major influence on the development of several areas of mathematics, but his most important contribution is his work on group theory. In *Theory of Lie Groups*, Chevalley further developed the ideas that Hermann Weyl presented in *The Classical Groups* (see p. 6) by formalizing the interrelation of algebra and geometry. Lie groups are important in mathematical analysis, physics, and geometry because they describe the symmetry of analytical structures. The work was initially planned as a two-volume set, but the author never completed the second volume, though he published on the topic in a series of journal papers.

Theory of Lie Groups was originally published in the Princeton Mathematical Series in 1946; it was republished in the Princeton Landmarks in Mathematics series in 1999. Owing to the ongoing importance of Lie groups in mathematics and theoretical physics, the book, currently in its sixteenth printing, remains important for researchers in both fields.