

Pressley, Andrew; Segal, Graeme

Loop groups. Repr. with corrections. (English) [Zbl 0638.22009](#)

Oxford Mathematical Monographs. Oxford (UK): Clarendon Press. viii, 318 p. £15.00 (1988).

See the extensive review by *S. I. Gel'fand* in [Zbl 0618.22011](#) of the first edition (1986).

MSC:

- [22E65](#) Infinite-dimensional Lie groups and their Lie algebras: general properties
- [17B67](#) Kac-Moody (super)algebras; extended affine Lie algebras; toroidal Lie algebras
- [22-02](#) Research exposition (monographs, survey articles) pertaining to topological groups
- [46M20](#) Methods of algebraic topology in functional analysis (cohomology, sheaf and bundle theory, etc.)
- [14M15](#) Grassmannians, Schubert varieties, flag manifolds
- [43A85](#) Harmonic analysis on homogeneous spaces
- [32M10](#) Homogeneous complex manifolds

Cited in **8** Reviews
Cited in **83** Documents

Keywords:

determinant line bundle; vertex operators; loop group; Kac-Moody Lie algebras; affine algebras; infinite-dimensional Lie groups; central extensions; circle group; Grassmannian; polarized Hilbert space; Schubert cell decomposition; homogeneous space; complex manifold; Borel-Weil theory; spin representation; Kac character formula; Bernstein-Gel'fand- Gel'fand resolution