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$\mathcal{W}$-SYMMETRY

edited by **P. Bouwknegt** and **K. Schoutens**

$\mathcal{W}$-symmetry is an extension of conformal symmetry in two dimensions. Since its introduction in 1985, $\mathcal{W}$-symmetry has become one of the central notions in the study of two-dimensional conformal field theory. The mathematical structures that underlie $\mathcal{W}$-symmetry are so-called $\mathcal{W}$-algebras, which are higher-spin extensions of the Virasoro algebra. This book contains a collection of papers on $\mathcal{W}$-symmetry, covering the period from 1985 through 1993. Its main focus is the construction of W-algebras and their representation theory. A recurrent theme is the intimate connection between $\mathcal{W}$-algebras and affine Lie algebras. Some of the applications, in particular $\mathcal{W}$-gravity, are also covered.

About the editors

Peter Bouwknegt received his PhD from the University of Amsterdam(1988). Since then, he has held research positions at the Massachusetts Institute of Technology, C.E.R.N. and presently at the University of Southern California.

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