

Preface

The aim of this paper is to study the identities satisfied by two-dimensional chiral quantum fields and to apply them to the basis of the theory of vertex algebras.

The paper is intended to be a good exposition so that the reader will be invited to the world of vertex algebras with handling formal series of linear endomorphisms in an elementary manner, while the paper contains some still new results. The paper also surveys some topics in economical ways.

This work was partially supported by Grant-in-Aid for Scientific Research, the Ministry of Education, Science and Culture. The second author was also supported by the Sumitomo Foundation.

Atsushi Matsuo (Tokyo) and Kiyokazu Nagatomo (Osaka)
Japan
March 1999