KAC-MOODY LIE ALGEBRAS

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Spring, 2001

An introduction to Kac-Moody algebras, a particular class of infinite dimensional Lie algebras, their representations, Kac-Moody groups, and the buildings of Kac-Moody groups over finite fields.

Prerequisite: Some familiarity with finite dimensional Lie algebras and their representations, as in Mathematics 128.

Bibliography

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[Ti1]   Tits, J, *Resume de Cours - Theorie des Groupes*, Annuaire du College de France (1980-1981), 75 -87.

[Ti2]   Tits, J, *Uniqueness and presentation of Kac-Moody groups over fields*, Journal of Algebra **105** (1987), 542-573.

[Ti3]   Tits, J, *Twin buildings and groups of Kac-Moody type*, LMS Lecture Notes 165 (Proceedings of a conference on groups, combinatorics and geometry, Durham 1990) (1992), Cambridge University Press, 249-286.