

Part I – Lie Algebras

Introduction

The main general theorems on Lie Algebras are covered, roughly the content of Bourbaki's Chapter I.

I have added some results on free Lie algebras, which are useful, both for Lie's theory itself (Campbell-Hausdorff formula) and for applications to pro- p -groups.

Lack of time prevented me from including the more precise theory of semisimple Lie algebras (roots, weights, etc.); but, at least, I have given, as a last Chapter, the typical case of \mathfrak{sl}_n .

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