

13. Exercise sheet

This sheet will be discussed on 08.02.2019

Exercise 1

Determine the Cartan matrices for the root system A_n .

Exercise 2

Consider the Cartan subalgebra \mathfrak{h} of $\mathfrak{sp}(2, \mathbb{C})$ given in section 6.2 of the lecture. Determine all regular vectors in $\mathfrak{h}_{\mathbb{R}}$.

Exercise 3

Determine all possible sets of simple roots for the root system G_2 .