UNIVERZITA KARLOVA

Faculty of Mathematics and Physics

Katedra aplikované matematiky

Academic year: 2018/2019

ASSIGNMENT OF BACHELOR'S THESIS

Name and surname: Nathan Chappell

Study programme: Computer Science

Study discipline: General Computer Science

the Dean of the faculty has assigned to you this bachelor's thesis in compliance with

the law no. 111/1998 Coll.:

Thesis topic: Minkowski-Weyl teorém

Thesis topic in English: Minkowski-Weyl Theorem

Guidelines for thesis preparation:

The aim of the thesis is to understand the Minkowski-Weyl theorem for polyhedra. This will be achieved by constructing a complete proof of the theorem and implementing an algorithm that uses the proof to convert a system of linear inequalities into a finite set of vertices and extreme rays of the polyhedron.

Bibliography:

Guenter Ziegler: Lectures on polytopes

Supervisor of bachelor's thesis: doc. Tiwary Hans Raj, M.Sc., Ph.D.

Opponents:

Consultants:

Date of assignment of bachelor's thesis: 17.4.2019

Bachelor's thesis submission deadline: according to the academic calendar for the respective academic year

Head of Department

Prague, on 14.5.2019

Dean