**Тюрин, Димитрий Николаевич.**  
K-группы Милнора и дифференциальные формы = Milnor K-groups and differential forms : Milnor K-groups and differential forms : диссертация ... кандидата физико-математических наук : 01.01.06 / Tyurin Dimitry Nikolaevich; [Место защиты: ФГАОУ ВО «Национальный исследовательский университет «Высшая школа экономики»]. - Москва, 2021. - 80 с.

## Оглавление диссертациикандидат наук Тюрин Димитрий Николаевич

Contents

Introduction

1 Preliminaries and supplementary results

1.1 Milnor K-groups

1.2 Weak k-stability

1.3 Differential forms

1.4 The map d log

1.5 i-rings

1.6 Differential forms of i-ring

1.7 Construction with filtered dg-rings

1.8 Derived p-adic completion

2 Milnor K-group of the ring of formal power series

2.1 Filtrations on the Milnor K-group

2.2 Construction of symbols from differential forms

2.3 Key result

2.4 Proof of Proposition

3 Bloch map

3.1 Bloch map for a split nilpotent extension

3.2 Category of split nilpotent extensions

3.3 Vanishing of relative de Rham cohomology

3.4 Finitely freely approximable functors

3.5 Construction of the Bloch map

4 Isomorphism theorem for the Bloch map

4.1 Reduction lemma

4.2 Special case of the isomorphism theorem

4.3 Proof of the isomorphism theorem

4.4 Non-existence of the Bloch map in a non-split case

5 Bloch—Artin—Hasse map

5.1 Artin-Hasse logarithm for i-rings

5.2 Bloch-Artin-Hasse map

5.3 Proof of Theorem

6 Isomorphism theorem for the Bloch—Artin—Hasse map

6.1 Isomorphism property for the Artin-Hasse logarithm

6.2 Isomorphism property for the Bloch-Artin-Hasse map

6.3 Proof of Theorem

7 Conclusion

8 References