

## 早大理工トポロジーセミナーのお知らせ

# Congruent Skein Relations and Various Volume Conjectures for Quantum Invariants

Qingtao CHEN

Swiss Federal Institute of Technology in Zurich

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場所： 早稲田大学西早稲田キャンパス 51号館 18階 18-12 室

### Abstract

I will first briefly review the history of quantum invariants. Then I will explain in detail how we obtain these congruent skein relations for (reformulated) colored HOMFLY-PT invariants from the idea from framed Labastida-Marino-Ooguri-Vafa Conjecture. I will also discuss the congruent relations of colored Jones polynomials and  $SU(n)$  invariants. Then I will report a recent discovery of Volume Conjectures and cyclotomic expansion for  $SU(n)$  invariants. These are joint works with K. Liu, P. Peng and S. Zhu. Finally I will discuss a recent progress of Volume Conjecture and cyclotomic expansion for  $SU(n)$  specialized superpolynomial associated to HOMFLY-PT homology. If time permits, I will also report a Volume Conjecture for Reshetikhin-Turaev and Turaev-Viro invariants, which is a joint work with Tian Yang.

西早稲田キャンパスへのアクセス, 51号館の位置は

<http://www.sci.waseda.ac.jp/campus>

を参照してください。皆様のお越しをお待ちしております。

世話人： 村上 順（早稲田大学基幹理工学部数学科）

e-mail: [murakami@waseda.jp](mailto:murakami@waseda.jp)