

研究計画

次の研究活動を予定している。

- (1)(岸本健吾, 清水理佳との共著) 結び目理論とゲーム, 朝倉書店 の出版活動.
- (2) 論文 結び目の数学教育について, 数学教育研究(岡森博和先生追悼号) の出版活動.
- (3) 論文(with I. Tayama) Tabulation of 3-manifolds of lengths up to 10 の出版活動.
- (4) 論文 (with A. Shimizu) Quantization of the crossing number of a knot diagram の改訂と出版活動.
- (5) 論文 The Alexander polynomials of immersed concordant links の出版活動.
- (6) 論文 Characteristic genera of closed orientable 3-manifolds の改訂と出版活動.
- (7) “Knotting probability of a spatial arc” の研究活動.
- (8) “Topological imitations of (3,1)-manifold pairs” の研究活動.
- (9) “編み物 “の複雑度の研究活動
- (10) (岸本健吾, 清水理佳との共同研究) 結び目理論を応用したパスワードシステムの研究活動
- (11) “Mathematical universe for 3-manifolds”の研究活動

Research Program

The following researches are projected.

- (1) Publishing the monograph in Japanese “(with K. Kishimoto and A. Shimizu) Knot Theory and Game, Asakura Publishing Co., Ltd.
- (2) Publishing the paper “On mathematics education of knots (in Japanese), Osaka Journal of Mathematics Education, Memorial edition to Professor Hirokazu Okamori.
- (3) Publishing the paper “(with I. Tayama) Tabulation of 3-manifolds of lengths up to 10”.
- (4) A revision of the paper “(with Ayaka Shimizu) Quantization of the crossing number of a knot diagram” and its publication.
- (5) Publishing the paper “The Alexander polynomials of immersed concordant links”.
- (6) A revision of the paper “Characteristic genera of closed orientable 3-manifolds” and its publication.
- (7) A study on knotting probability of a spatial arc.
- (8) A study on topological imitations of $(3,1)$ -manifold pairs.
- (9) A study on a complexity of knitting.
- (10) (with K. Kishimoto and A. Shimizu) A study on a password system applying knot theory.
- (11) A study on mathematical universe for 3-manifolds.