

Research Program

The following research activities include the following programs.

- (1) A study on knotting probability of a spatial arc.
- (2) A new development on topological imitations of $(3,1)$ -manifold pairs.
- (3) (with K. Kishimoto and A. Shimizu) A study on a password system applying knot theory.
- (4) Diffusion of an infant and elderly versions of the knot game “Region Select” into society.
- (5) A study on a complexity of knitting.
- (6) A study on the fundamental group of a ribbon 2-knot.
- (7) A study on moves on band-chord diagrams of a bounded ribbon surface-link with application to nothing of exotic knotting structures on a surface-link.
- (8) (with T. Kadokami) A study on an analytic function for an infinite family of graphs via Blaschke product.
- (9) A further developing study on cross-index of a graph.