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) Verification of an active effect of brain on an elderly version of the game "Region Select" applying knot theory.

(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 of a smooth surface-knot

(8) A study on a chord graph constructed from a ribbon surface-link

(9) A study on Alexander polynomial of middle cross-section of 2-link

(10) A computable numerical index of a graph from a knot theoretical viewpoint