

Research Activity Program

This year's research activities include the following plans.

- (0) Publication program of the papers of the items 134-140 in the paper list.
- (1) A study on 3-dimensional knitting patterns.
- (2) A new development on knotting probability of a spatial arc.
- (3) A new development on topological imitations of $(3,1)$ -manifold pairs.
- (4) A new development on a slice knot.
- (5) A study on a Seifert hypersurface for a surface-knot.
- (6) The crossing number of a knot diagram via 4D topology
- (7) M. A. Kervaire's conjecture on weights of the free product of every finitely presented group and the infinite cyclic group.
- (8) A classification of Hermitian forms over one-variable integral Laurent polynomial ring via 4D PL manifolds