Topology of complexes arising in models for Distributed Computing

Dmitry Feichtner-Kozlov

University of Bremen, Germany

We shall talk about various simplicial models for distributed computing. The main model consists of iterated chromatic subdivisions and corresponds to the well-used model in distributed computing. Using the Weak Symmetry Breaking as an example we shall translate questions of distributed computing into purely combinatorial-simplicial questions for the corresponding complex. We shall see how this approach leads to many interesting new and open questions in various fields of mathematics.