

In this talk, I will present a fairly recent model of distributed computation - the Minor Aggregation Model. In each round of the Minor Aggregation Model, an arbitrary subset of edges contracts, resulting in a minor graph of the original communication graph. The nodes of this minor graph (supernodes) then compute an aggregate of their inputs for the round and send it to their neighboring supernodes. Each node of the original graph receives an aggregate of all values sent to its supernode. The model is of specific interest, as it can be simulated in many established models of distributed computation, such as PRAM, CONGEST and HYBRID allowing algorithms designed for the Minor Aggregation Model to be executed in any of these models as well. As we construct the simulation frameworks with respect to the topology, they provide universally optimal runtime on each graph.