2024 SIROCCO Prize for Innovation in Distributed Computing

We are pleased to announce that the 2024 Prize for Innovation in Distributed Computing is awarded to Prof. Shay Kutten from the Technion - Israel Institute of Technology. Shay is a distinguished figure in the realm of distributed computing, and his significant contributions to the field, particularly in the area of proof labeling schemes, underscore his expertise and influence within the SIROCCO community.

Inspired by the P versus NP paradigm, the concept of proof labeling schemes represents an abstract proof system designed to verify graph properties in a distributed manner. Shay's seminal work which appeared in PODC 2005 [1], in collaboration with Amos Korman and David Peleg, introduced and formalized this concept, laying the foundation for further exploration and research. Notably, Shay's earlier collaborations with Yehuda Afek and Moti Yung [2, 3] implicitly paved the way for the development of proof labeling schemes, highlighting his longstanding dedication to advancing the field.

Throughout his career, Shay has continued to delve into the study of proof labeling schemes, publishing numerous papers dedicated to this topic and closely related areas. In particular, his contributions have been instrumental in applying proof labeling schemes and local verification techniques to the design of self-stabilizing algorithms, thereby propelling the development of self-stabilizing systems.

For his pioneering advancements in proof labeling schemes and their application to self-stabilizing systems, we are proud to present the 2024 Prize for Innovation in Distributed Computing to Prof. Shay Kutten.