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Nessyahu Prize 2008

The Nessyahu Prize committee has decided to award the 2008 Nessyahu Prize to Dr. Adi Shraibman from the Hebrew University and Dr. Yaron Ostrover from Tel Aviv University.

Dr. Shraibman's doctoral thesis (supervised by Prof. Linial) is a comprehensive investigation of various complexity measures on 0-1 matrices. The thesis introduces novel techniques, which have already had an impact on the study of fundamental questions concerning the complexity of communication, and which led to the solution of several important open problems. For instance, the thesis shows that matrices with small discrepancy always have a large quantum communications complexity (even if the two parties share mixed quantum states). Moreover, in a sequel paper of which Adi Shraibman is a co-author, techniques from his thesis (along with other techniques) are used to prove the first lower bound for the complexity of multi-party communications of set intersections.

Dr. Yaron Ostrover is awarded the Nessyahu prize for his contribution to the theory of symplectic manifolds, particularly the theory of Lagrangian submanifolds. The thesis (supervised by Prof. Polterovich) excels both in its depth and breadth, and makes significant contributions toward solving several important problems in the modern area of Hofer metrics on the group of Hamiltonian diffeomorphisms. Among

Yaron Ostrover's contributions, a theorem on closed symplectic manifolds merits special mention; this is a substantial advance on a problem which has been open for ten years. Particularly noteworthy are Dr. Ostrover's advances concerning quantum homologies and spectral invariants of Hamiltonian diffeomorphisms. He constructs a new class of Calabi quasi-morphisms on the group of Hamiltonian diffeomorphisms for closed symplectic manifolds.

With regards,
Prof. Michael Lin
President, Israel Math Union