Prof. Micha Sharir – CV

June 2018

Micha Sharir is a professor of computer science at Tel Aviv University, and the incumbent of the Isaias and Alicia Nizri Chair in Computational Geometry and Robotics. He has also been a visiting research professor at New York University, and has served (twice) as the Chair of the Computer Science Department, and also as the Head of the School of mathematical Sciences. He received his degrees (B.Sc., M.Sc., and Ph.D.) in Mathematics from Tel Aviv University. He is also a co-founder of the Minerva Minkowski Center in Geometry.

His research areas are in computational and combinatorial geometry, and in the past also in robotics, as well as their numerous applications. With Jack Schwartz of NYU, in a series of works on "the piano movers' problem", he founded the area of algorithmic motion planning in robotics, and has made many fundamental contributions to this area. His extensive work in computational and combinatorial geometry includes the study of Davenport-Schinzel sequences and their numerous geometric applications, the development of the theory of geometric arrangements and their diverse applications, the study of basic problems in geometric optimization, including efficient algorithms for linear programming and so-called LP-type problems, and the study of various basic problems in combinatorial geometry, including incidences between points and lines, curves, or surfaces. In the past decade he has worked on the applications of algebraic techniques to problems in combinatorial geometry, where he co-authored several of the recent major ground-breaking results.

Prof. Sharir has published about 350 papers, and also about 250 papers in conference proceedings. He has written and edited four books. He has supervised 27 Ph.D. students, many of whom are holding academic positions in Israel and abroad.

His work has lead to the award of several prizes, including the EMET Prize in 2007, the Landau Proze of Mif'al Hapayis (2002), the Max-Planck Award (1992), and the Feher Prize (1999). He received a Doctor Honoris Causa from Utrecht University (1996) and is a Fellow of the ACM.