This volume contains a collection of papers presented at the international conference IPM 20—Combinatorics 2009, which was held at the Institute for Research in Fundamental Sciences in Tehran, Iran, May 15–21, 2009.

The conference celebrated IPM’s 20th anniversary and was dedicated to Reza Khosrovshahi, one of the founders of IPM and the director of its School of Mathematics from 1996 to 2007, on the occasion of his 70th birthday.

The conference attracted an international group of distinguished researchers from many different parts of combinatorics and graph theory, including permutations, designs, graph minors, graph coloring, graph eigenvalues, distance regular graphs and association schemes, hypergraphs, and arrangements.