

## INTRODUCTION

The Regional Summer School on Scaling and Disordered Systems was held at the Institute for Advanced Studies in Basic Sciences (IASBS) in Zanjan, Iran, during July 3–14, 1999. The motivation for organizing this international school was twofold: (1) To bring to Iran some of the leading researchers in the field of scaling and disordered media in order to provide a forum in which a wide range of problems in this active research area can be discussed, and (2) to introduce to the physics community the recent progress that has been made in physics education and research in Iran, and in particular at IASBS. Our motivation is perhaps best described by the Inauguration Address of the School, delivered by Professor Y. Sobouti, the Director of IASBS, from which we quote:

Mohammad ibn Musa al-Khwarazmi, mathematician (d. 846), Mohammad ibn Zakariyya al-Razi, physician and chemist (d. 925), al-Farabi, philosopher and musicologist (d. 950), Avicenna, philosopher and man of medicine (d. 1037), al-Biruni, astronomer and chronologist (d. 1046), Omar Khayyam, mathematician and poet (d. 1131), and Khaajeh Nasiruddin Tusi, astronomer, mathematician, and statesman (d. 1274) are but a few among the many top-ranking thinkers that the people and culture of Iran have offered the world in the course of their long history. The same potential still exists in this land. The key to rekindle this long forgotten tradition is to provide the youth of Iran with the proper environment and means that trigger their ingenuity and imagination.

The papers in this volume represent the lectures that were delivered at the School. Computer simulations and algorithms played an important role in most of the lectures and discussions that took place in the School, which is why these papers are published in the Annual Reviews of Computational Physics VIII. (The word “algorithm” has its root in this name al-Khwarazmi.) The School was highly successful in introducing to many talented students, who had been selected from amongst universities of the region, the enormous success that the

ideas of scaling and universality have enjoyed in describing disordered media, while at the same time making it clear that many of the theoretical approaches and models for such media have found practical applications in the industry.

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The organizers and Guest Editors,  
M. R. H. Khajepour  
M. R. Kolahchi  
M. Sahimi