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Sommario/riassunto

This volume comprises ten thoroughly refereed and revised full papers originating from an interdisciplinary workshop on biocomputation entitled "Evolution as a Computational Process", held in Monterey, California in July 1992. This book is devoted to viewing biological evolution as a giant computational process being carried out over a vast spatial and temporal scale. Computer scientists, mathematicians and physicists may learn about optimization from looking at natural evolution and biologists may learn about evolution from studying artificial life, game theory, and mathematical optimization. In addition to the ten full papers addressing e.g. population genetics, emergence, artificial life, self-organization, evolutionary algorithms, and selection, there is an introductory survey and a subject index.