This issue of the journal reports some selected contributions from the First Converging Science conference held in Trento in December 2004 and chaired by Luca Cardelli, Stephen Emmott and Corrado Priami. The first contribution is the transcription of the keynote lecture by Robin Milner on the foundations of global computing. The second paper, by John Wooley, reports on the interdisciplinarity in innovation initiatives. Ronan Sleep presents a grand challenge for the convergence of sciences in the third paper, while Andrew Jones discusses how to apply computer science research to biodiversity in the fourth contribution. The fifth paper, by Bob Hertzberger, introduces the concept of e-science. The sixth paper, by Francois Fages, describes the role of syntax and semantics of programming languages in systems biology, while Ivan Arisi and his co-authors report on a European initiative on neuronal cells in the seventh contribution. The eighth paper, by Imrich Chlamtac et al., deals with the role of biological inspiration in autonomic computing. The ninth paper, by Riguidel, covers digitalization and telecommunications.

The volume ends with two regular contributions. The first one by Blossey, Cardelli and Phillips describes a compositional approach to the quantitative modelling of gene networks. The last paper of the volume by Jeong and Miyano introduces a prediction method for the protein–RNA interaction.

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