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## FOREWORD

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### Special Section on Mathematical Systems Science and its Applications

Mathematical systems science studies design, analysis, verification, and control based on mathematical models. It applies to many engineering and scientific research areas, including emergent fields such as cyber-physical systems, man-machine systems, open systems science, and systems biology. This special section aims to clarify the state of the art of research on mathematical systems science and promote future research.

The editorial committee has received 13 papers and accepted six after a careful review by two reviewers for each article. This special section contains an invited paper:

“Thermal-comfort Aware Online Co-scheduling Framework for HVAC, Battery Systems, and Appliances in Smart Buildings” by Daichi Watari, Ittetsu Taniguchi, Francky Catthoor, Charalampos Marantos, Kostas Siozios, Elham Shirazi, Dimitrios Soudris, and Takao Onoye.

This paper won the MSS best paper award among the papers presented at MSS technical meetings in 2021.

On behalf of this section’s editorial committee, I would like to thank all the authors for their contributions and the referees for cooperating in the review process. I am also grateful to the following guest associate editors of the editorial committee for their kind cooperation.

Guest Associate Editors:

Daisuke Ishii (Japan Advanced Institute of Science and Technology), Atsushi Ohta (Aichi Prefectural University), Shun Kataoka (Otaru University of Commerce), Takafumi Kanazawa (Setsunan University), Koichi Kobayashi (Hokkaido University), Norihiko Shinomiya (Soka University), Ichiro Toyoshima (Toshiba Energy Systems), Masashi Nomura (Mitsubishi Electric Corporation), Shingo Yamaguchi (Yamaguchi University), Tatsushi Yamasaki (Setsunan University), Liu Jianquan (NEC)

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Yoshinobu Kawabe, Guest Editor-in-Chief

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**Yoshinobu Kawabe** (*Member*) received his B.E., M.E., and Ph.D. degrees in information engineering from Nagoya Institute of Technology in 1995, 1997, and 2003, respectively. He joined NTT Communication Science Laboratories, Nippon Telegraph and Telephone Corporation in 1997. In 2002, he was a visiting research scientist at MIT Laboratory for Computer Science. He is currently a professor in the Faculty of Information Science, Aichi Institute of Technology. His research interests include formal methods for computer software, privacy verification, and computational trust theory. He is a member of ACM, JSSST, IPSJ, and SOFT.

