

**EXTENDED DIGITAL TWINS INCLUDING UNCERTAINTY AND
COMPLEXITY OF HUMAN/SOCIETY AND HUMAN KNOWLEDGE**

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MINISYMPOSIUM

Society5.0 aims to create a human-centered society that balances economic development and social problem-solving through CPS systems that highly integrate cyberspace and physical space. In this Mini-Symposium, we will consider the construction of the Digital Twins that accurately model the real world, which is necessary to realize such CPS. To do this, we will incorporate the uncertainty and complexity inherent in humans and society into the Digital Twins, and further consider the integration of human knowledge (scientific knowledge, experiential knowledge, tacit knowledge). We call these realized Digital Twins as “Extended Digital Twins.” We will gather presentations for the computational information science infrastructure, new mathematical models, and AI approaches that are necessary to achieve them.