



# 31<sup>st</sup> International Workshop on Post-Binary ULSI Systems (ULSIWS2022)

All in JST

## Tentative Program

21:00-21:05	Opening Remark <i>General Chair, <b>Masanori Natsui</b> (Tohoku University, Japan)</i>
Session 1: Chair <b>Shinobu Nagayama</b> (Hiroshima City University, Japan)	
21:05-21:20	Pre-Emphasis Technique for PAM-4 Signaling Using Code Transition Information <b>Toshiaki Yonekawa, Yasushi Yuminaka</b> (Gunma University, Japan)
21:20-21:35	Optimization of Segmented DAC Linearity Improvement Algorithm Using Unit Cell Sorting with Digital Method <b>*Yi Liu, *Anna Kuwana, *Shogo Katayama, *Xiongyan Li, **Atsushi Motozawa, *Haruo Kobayashi</b> (*Gunma University, Japan **Renesas Electronics Corp., Japan)
21:35-21:50	Operation-Condition-Aware Dynamic Power Gating for Nonvolatile LSIs <b>Fangcen Zhong, Masanori Natsui, Takahiro Hanyu</b> (Tohoku University, Japan)
21:50-22:00	Break
Session 2: Chair <b>Yosuke Iijima</b> (National Institute of Technology, Oyama College, Japan)	
22:00-22:15	Distributed Arithmetic for Taylor-Series Expansion <b>*Xaybandith Hemthavy, *Jianglin Wei, *Shogo Katayama, *Anna Kuwana, *Haruo Kobayashi, **Kazuyoshi Kubo</b> (*Gunma University, Japan **Oyama National College of Technology, Japan)
22:15-22:30	Pseudo Random Number Generation Algorithms with Fibonacci Sequence <b>Ryuya Ohta, Anna Kuwana, Shogo Katayama, Haruo Kobayashi</b> (Gunma University, Japan)
22:30-22:45	A Proposal of Equivalence Classes for Index Generation Functions Based on Their Row-Shift Decompositions <b>Rie Kometani, Shinobu Nagayama, Masato Inagi, Shin'ichi Wakabayashi</b> (Hiroshima City University, Japan)
22:45-22:50	Closing <i>General Chair, <b>Masanori Natsui</b> (Tohoku University, Japan)</i>

10 (Talk)+5(Q&A) minutes for each presentation