

# Session Table

- December 11, Meeting Room, Shikoku University Plaza, Shikoku University

**13:00–14:20 11PM1** Application of Nonlinear Dynamics

Chair: Masahiro Wada (Konan University)

**14:20–14:50 11PM2** Invited Talk I

Chair: Masahiro Wada (Konan University)

**14:50–15:20 11PMp** Poster Session I

Chair: Tetsushi Ueta (Tokushima University)

**15:20–17:00 11PM3** Hybrid Dynamical Systems

Chair: Kenya Jinno (Nippon Institute of Technology)

**18:30–20:30** Conference Banquet at the Grand Palace Tokushima

- December 12, Meeting Room, Shikoku University Plaza, Shikoku University

**09:30–10:30 12AM1** Circuits and Systems

Chair: Hiroyuki Kitajima (Kagawa University)

**10:30–11:00 12AMp** Poster Session II

Chair: Yoshifumi Nishio (Tokushima University)

**11:00–11:30 12AM2** Invited Talk II

Chair: Toshimichi Saito (Hosei University)

**11:30–12:10 12AM3** Complex Networks

Chair: Toshimichi Saito (Hosei University)

**13:10–13:40 12PM1** Invited Talk III

Chair: Hisato Fujisaka (Hiroshima City University)

**13:40–14:20 12PM2** Optimization

Chair: Hisato Fujisaka (Hiroshima City University)

**14:20–14:50 12PMp** Poster Session III

Chair: Yasuteru Hosokawa (Shikoku University)

**14:50–15:50 12PM3** Nonlinear Networks

Chair: Shintaro Arai (Aichi University of Technology)

**15:50–16:50** Closing Ceremony with a special lecture by Prof. Tanaka.

# Technical Program

## 11PM1: Application of Nonlinear Dynamics

Date: December 11, 13:00–14:20

Chair: Masahiro Wada (Konan University)

**11PM1-1 Stochastic Resonance in Delay-Locked Loop Driven by Multiple Access Interferences** 1

Keisuke Nagata (Hiroshima City University), Hisato Fujisaka (Hiroshima City University), Takeshi Kamio (Hiroshima City University), Chang-Jun Ahn (Hiroshima City University), Kazuhisa Haeiwa (Hiroshima City University)

**11PM1-2 A resonate-and-fire digital spiking neuron: Comparison of bifurcations to Izhikevich's simple neuron** 5

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**11PM1-3 Numerical Analysis of an Impact Oscillator with Interrupted Periodic Force** 9

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## 11PM2: Invited Talk I

Date: December 11, 14:20–14:50

Chair: Masahiro Wada (Konan University)

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Takaya Yamazato (Nagoya University), Shinji Ozawa (Aichi University of Technology)

## 11PM3: Hybrid Dynamical Systems

Date: December 11, 15:20–17:00

Chair: Kenya Jinno (Nippon Institute of Technology)

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- 11PM3-2** **A Simple Piecewise Linear Switched Dynamical System based on Sleep-Waking Models** 21  
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- 11PM3-3** **Invariant Interval of the Chaotic Attractors in a Switched Dynamical System with Spike Noise** 23  
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- 11PM3-4** **On delay-coupled bifurcating neurons** 26  
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## 12AM1: Circuits and Systems

Date: December 12, 09:30–10:30

Chair: Hiroyuki Kitajima (Kagawa University)

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**12AM1-3 Finding All DC Solutions of Piecewise-Linear Circuits Using Integer Programming** 40

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## 12AM2: Invited Talk II

Date: December 12, 11:00–11:30

Chair: Toshimichi Saito (Hosei University)

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Date: December 12, 11:30–12:10

Chair: Toshimichi Saito (Hosei University)

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## 12PM1: Invited Talk III

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Chair: Hisato Fujisaka (Hiroshima City University)

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Chair: Hisato Fujisaka (Hiroshima City University)

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Chair: Shintaro Arai (Aichi University of Technology)

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## 11PMp: Poster Session I

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**12AMp: Poster Session II**

Date: December 12, 10:30–11:00

Chair: Yoshifumi Nishio (Tokushima University)

**12PMp: Poster Session III**

Date: December 12, 14:20–14:50

Chair: Yasuteru Hosokawa (Shikoku University)