[072]MI Lecture Note Series

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平成28年度 九州大学マス・フォア・インダストリ研究所 共同利用研究集会

Mathematical quantum field theory and related topics

Date : 6 /June/2016 - 8/June/2016

Place : IMI Kyushu University

West 1 building D-413
〒819-0395 744 Motooka Nishi-ku Fukuoka-city

Tadahiro Miyao (Hokkaido)

Asao Arai (Hokkaido)

Daniel Braak （Augsburg）

Motoichi Ohtsu (Tokyo, emeritus)

Masato Wakayama (Kyushu IMI)

Marco Falconi (Rome)

Tomohiro Kanda (Kyushu)

Fumio Hiroshima (Kyushu)

Oliver Matte (Aarhus)

Zied Ammari (Rennes)

Nobuhiro Asai (Aichi)
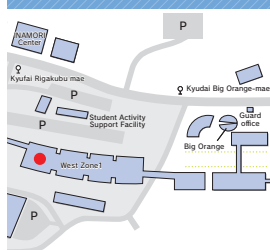
Kazuya Okamura (Nagoya)

Izumi Ojima (Kyoto)

Akira Sakai (Hokkaido)

Hiroshi Ando (Chiba)

Masao Hirokawa (Hiroshima)

Tomihiro Hashizume (Hitachi/Tokyo Inst. Tech.)

■URL ▸ http://www.imi.kyushu-u.ac.jp/eng/events/view/1081

■問い合わせ先 ▸ 九州大学マス・フォア・インダストリ研究所
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KYUSHU UNIVERSITY
ITO CAMPUS

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http://www.imi.kyushu-u.ac.jp/pages/joint_research_auditorium.html

Monday 6 June

10：00-10：50　Tadahiro Miyao (Hokkaido)

　Long-range charge order in the two-dimensional ionic Hubbard model

11：00-11：50　Asao Arai (Hokkaido)

　Inequivalence of quantum Dirac fields of different masses and a general structure behind it

13：30-14：20　Daniel Braak (Augsburg)

　Integrable and non-integrable models in quantum optics

14：30-15：20　Motoichi Ohtsu (Tokyo, emeritus)

　Dressed Photons

　---Concepts of off-shell photon and applications to light-matter fusion technology---

16：00-16：50　Masato Wakayama (Kyushu IMI)

　Representation theoretic approach to the spectrum of quantum Rabi or its generalized models

17：00-17：50　Marco Falconi (Rome)

　Borh's correspondence principle in the Nelson model

Tuesday 7 June

10：00-10：50　Tomohiro Kanda (Kyushu)

　A KMS state on the resolvent CCR algebra

11：00-11：50　Fumio Hiroshima (Kyushu)

　Semi-relativistic QED

13：30-14：20　Oliver Matte (Aarhus)

　Differentiability properties of stochastic flows in non-relativistic QED

14：30-15：20　Zied Ammari (Rennes)

　On the relationship between non-linear Schroedinger dynamics,
　Gross-Pitaevskii hierarchy and Liouville's equation

16：00-16：50　Nobuhiro Asai (Aichi)

The radial Bargmann measure for the Fock space of type B

Wednesday 8 June

10：00-10：50　Kazuya Okamura (Nagoya)

On a mathematical treatment of measurement correlations

11：00-11：50　Masao Hirokawa (Hiroshima)

How is the ground state of the quantum Rabi model dressed with a real photon?

13：30-14：20　Akira Sakai (Hokkaido)

Self-avoiding walk on random conductors

14：30-15：20　Hiroshi Ando (Chiba)

Descriptive analysis of self-adjoint operators and the Weyl-von Neumann equivalence relation

15：40-16：30　Masao Hirokawa (Hiroshima)

Introduction of a mathematical approach to sum-frequency generation in non-linear optics

16：45-17：45　Tomihiro Hashizume (Hitachi/Tokyo Inst. Tech.) IMI-colloquium

Scanning non-linear optical probe microscopy utilizing tip-enhanced near field optics