

=== 量子科学研究センターセミナーのご案内 ===

林 正人 先生（香港中文大学（深圳）、深圳国際量子研究院、名古屋大学）が 7 月 25 日に本学をご訪問されます。つきましては下記の要領で、量子科学研究センター主催のセミナーを開催いたします。

お招きする林先生は古典・量子情報理論において幅広い研究成果を上げておられ、それらの貢献により数々の受賞をされております。今回は古典通信から量子通信に関する安全性についてご講演いただけることになりました。

研究室の研究員、学生の皆様もお誘いあわせのうえ、奮ってご参加ください。なお、林先生のご厚意により、zoom によるハイブリッド開催を予定しております。接続先情報については、メール末尾をご確認ください。

[講演情報]

日時：2024 年 7 月 25 日(木) 16:30 -

場所：東 3 号館 301 室

主催：量子科学研究センター <http://www.ias.uec.ac.jp/>

講演者：

Prof. Masahito Hayashi (The Chinese University of Hong Kong, Shenzhen, Shenzhen International Quantum Academy, Nagoya University)

講演タイトル：

Various types of secure communication protocols: from classical to quantum

講演要旨：

This talk explains various types of secure communication protocols for classical systems as well as for quantum systems. This talk starts with secure communication between two users. In the second part, this talk discusses secure communication over various networks including butterfly network, one-hop relay network, general single source and single terminal network model, and unicast relay network.

講師略歴：

Masahito Hayashi received the B.S. degree from the Faculty of Sciences, Kyoto University, Japan, in 1994, and the M.S. and Ph.D. degrees in mathematics from Kyoto University, Japan, in 1996 and 1999, respectively. He worked in Kyoto University as a Research Fellow of the Japan Society of the Promotion of Science (JSPS) from 1998 to 2000, and worked in the Laboratory for Mathematical Neuroscience, Brain Science Institute, RIKEN from 2000 to 2003, and worked in ERATO Quantum Computation and

Information Project, Japan Science and Technology Agency (JST) as the Research Head from 2000 to 2006. He worked in the Graduate School of Information Sciences, Tohoku University as Associate Professor from 2007 to 2012. In 2012, he joined the Graduate School of Mathematics, Nagoya University as Professor. He worked in the Shenzhen Institute for Quantum Science and Engineering, Southern University of Science and Technology as Chief Research Scientist from 2020 to 2023. In 2023, he joined School of Data Science, The Chinese University of Hong Kong, Shenzhen as Professor and was granted as Presidential Chair Professor. He also joined Shenzhen International Quantum Academy as Chief Research Scientist. Also, he worked in Centre for Quantum Technologies, National University of Singapore as Visiting Research Associate Professor from 2009 to 2012 and as Visiting Research Professor from 2012 to now. In 2024, he joined Department of Information Engineering, The Chinese University of Hong Kong as Adjunct Professor. In 2011, he received Information Theory Society Paper Award (2011) for “Information-Spectrum Approach to Second-Order Coding Rate in Channel Coding”. In 2016, he received the Japan Academy Medal from the Japan Academy and the JSPS Prize from Japan Society for the Promotion of Science. In 2017, he was promoted to IEEE Fellow. In 2022, he was promoted to IMS Fellow. In 2024, he was selected as the Best Scientist in the Field of Mathematics (13th in Japan and 955th in the world) and Best Scientist in the Field of Engineering and Technology (26th in Japan and 1872th in the world) in the top scientists ranking released by Research.com.

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Topic: 林正人先生 量子科学研究センターセミナー

Time: Jul 25, 2024 04:15 PM Osaka, Sapporo, Tokyo

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