

Award of an Honorary Research Doctorate in Physics to Dr. Franco Nori

June 10, 2024

Image: Great Hall

Thursday 13 June, at 10.30 AM at the “V. Ricevuto” Great Hall of the University, Dr. Franco Nori will be awarded an Honorary Research Doctorate in Physics.

Dr. Nori is a “Chief Scientist” at the RIKEN research center (Japan). He is affiliated with the “Theoretical Quantum Physics Laboratory”, and he is also “Team Leader” of the “Quantum Information Theory Research Team”, at the RIKEN Quantum Computing Center.

The scientist will hold a *Lectio Doctoralis* on the topic “Introduction to superconducting quantum circuits for basic science and for quantum computing”. The *Laudatio* will be entrusted to prof. Salvatore Savasta, Professor of the Physics of Matter.

The research group of Dr. Nori has conducted pioneering interdisciplinary studies at the interface between nanoscience, open dissipative quantum systems, quantum information processing, superconducting quantum circuits for quantum computing, photonics, quantum optics, atomic physics, nanomechanics, computational physics, and condensed matter physics.

The scholar has published numerous highly cited papers (i.e., top 1% of all papers in all areas of physics). He has published more than: 140 articles in Physical Review Letters, 76 articles in Science and Nature, as well as numerous publications in other leading journals. According to the Web of Science, it has more than 67,000 citations and an h-index over 120. According to Google Scholar it has over 95,000 citations and an h-index greater than 136.

For the past seven years he has been selected by Web of Science as a “Highly Cited Researcher” in physics: from 2017 to 2023 (less than 0.1% of physicists are selected). He is elected Fellow of the: American Physics Society (APS), Institute of Physics (IoP), American Association for the Advancement of Science (AAAS), and Optical Society of America (OSA) [the latter “for

fundamental contributions to the science of 'quantum and optical information, including the quantum electrodynamics of circuits, and the interface between quantum optics and quantum circuits'].

He also received the 2014 Physics Research Award from the Matsuo Foundation, Japan, and the 2013 Science Award from the Ministry of Education, Culture, Sports, Science and Technology of Japan. He also received an "Award for Excellence in Research" and an "Award for Excellence in Education" from the University of Michigan. He is an elected member of the Academia Europea, the Latin American Academy of Sciences, and a foreign member of the Royal Swedish Society of Arts and Sciences, Gothenburg, Sweden.

Nori won the 2023 Willis E. Lamb Award and also the 2024 Charles H. Townes Medal (from the Optical Society of America, OSA, now Optica) for fundamental contributions to research in quantum optics, quantum electronics, and quantum information.

For several years he has contributed to the training of several PhD students in Physics at the University of Messina, who have been hosted at the Riken research center for several months or years, and have actively collaborated in the research coordinated by him. He has also started a significant scientific collaboration activity with several members of the PhD Course in Physics at the University of Messina.

The proposal to award the Honoris Causa Doctorate in Physics was born from the idea of wanting to concretely recognize the merit of those who have indisputably contributed to scientific progress in the field of quantum physics, which represents one of the specific areas of the PhD Course in Physics at the University of Messina.