



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA

# SUMMER SCHOOL QUANTUM SENSING, INFORMATION PROCESSING AND COMPUTING

BOLOGNA, JULY 14 — 20, 2022

July 20, 2022

To whom it may concern:

This is to certify that Domingo Ranieri has attended to the school “QUANTUM SENSING, INFORMATION PROCESSING AND COMPUTING” held at the Department of Physics and Astronomy of the University of Bologna (Italy) from July 14th to 20th, 2022, as Regular Participant.

The School consisted of the following set of main lectures:

- Gavin Brennen (MacQuarie University): *The Many Paths for Quantum Computation* (3h)
- Giacomo De Palma (University of Bologna): *Quantum Communication Theory* (3h)
- Michael Kastner (Stellenbosch University): *Analog Quantum Simulation: engineering unitaries and putting them to use* (3h)
- Vesna F. Mitrović (Brown University): *Sensing at the Quantum Limit: spin squeezing and multi-modal techniques* (3h)

and various seminars for a total of 12h.

In addition the participants took part to collaborative work sessions, for a total of 10 hours, with project-oriented activities that included a final presentation in the last day of the School.

The full information about the school can be found at

<https://site.unibo.it/school-physical-sensing-and-processing>

The Director of the School  
Elisa Ercolessi

*elisa ercolessi*