

Philosophiae Doctor in Quantum Technologies 2019

Friday 08 February 2019 - Friday 08 February 2019

Aula Caianiello - Dipartimento di Fisica "Ettore Pancini"

Scientific Programme

****Philosophiae Doctor in Quantum Technologies****

February 8th, 2019

- Greetings from Prof. Leonardo Merola, Direttore del Dipartimento Fisica - Università di Napoli Federico II
- Prof. Piero Salatino, Presidente della Scuola Politecnica e Scienze di Base - Università di Napoli Federico II

- Greetings Prof. Gaetano Manfredi, Rettore dell'Università di Napoli Federico II

****"UNINA vs Quantum Technologies and advanced education"**

15.10 - ****Sir Anthony Leggett****
Nobel Laureate 2003

[Testing the limits of quantum mechanics: motivation, state of play, prospects][2]

15.30 ****QUANTUM TECHNOLOGIES ACTIVITIES IN FIRENZE****

- Augusto Smerzi: [Useful entanglement for quantum technologies][3]

- Marco Bellini: [Non-classicality and entanglement by photon addition and subtraction][4]

- Iacopo Catani: [Quantum simulation of solid-state systems with ultracold atoms][5]

16.15 ****QUANTUM TECHNOLOGIES ACTIVITIES IN CAMERINO****

- David Vitali: [Quantum sensing and communication with hybrid devices][6]

- Sebastiano Pilati: [Many-body simulations for adiabatic quantum optimization][7]

17.00 ****QUANTUM TECHNOLOGIES ACTIVITIES IN NAPOLI****

- Davide Massarotti: [Macroscopic Quantum phenomena in superconducting junctions][8]

- Procolo Lucignano: [Theory and simulation of materials and devices for quantum technologies][9]

- Alberto Porzio: [Entangling different degrees of freedom of optical

fields][10]

- Felice Gesuele: 2D van der Waals heterostructures for light-matter-states engineering and guiding

17.45 ****CONCLUSIONS****

[1]: <https://indico.unina.it/event/26/attachments/62/167/Leggett.pdf>

[2]: <https://indico.unina.it/event/26/attachments/62/167/Leggett.pdf>

[3]: <https://indico.unina.it/event/26/attachments/62/139/smerzi.pdf>

[4]: <https://indico.unina.it/event/26/attachments/62/136/Bellini.pdf>

[5]: https://indico.unina.it/event/26/attachments/62/145/Jacopo_Napoli_2019.pdf

[6]: <https://indico.unina.it/event/26/attachments/62/142/Vitali.pdf>

[7]: https://indico.unina.it/event/26/attachments/62/138/Pilati_Talk_Napoli2019.pdf

[8]: <https://indico.unina.it/event/26/attachments/62/141/Massarotti.pdf>

[9]: <https://indico.unina.it/event/26/attachments/62/144/Lucignano.pdf>

[10]: <https://indico.unina.it/event/26/attachments/62/143/porzio.pdf>