





## **Quantum Technologies Deep Dive -**A Modular Introductory Course for Scientists and Engineers 24.10.2023 – 09.04.2024

| Module  | Date, Location                                       | Topic  |
|---|--|--|
| Quantum Basics<br>(Quantum Computing<br>Module)                 | 24/10/23, 9 am – 6 pm,<br>on-site (Freimann, Munich) | What is a Qubit?                               |
|   | 25/10/23, 9 am – 1 pm,<br>on-site (Garching, Munich) | Quantum Hardware                               |
| Quantum Computing   | 07/11/23, 5 pm – 7 pm, online                        | Quantum Algorithms                             |
|   | 14/11/23, 5 pm – 7 pm, online                        | Quantum Simulation                             |
|   | 21/11/23, 5 pm – 7 pm, online                        | Fault-Tolerant Quantum Computing               |
|   | 28/11/23, 5 pm – 7 pm, online                        | Roadmap for Quantum Computing                  |
|   | 14/12/23, 9 am – 1 pm, online                        | Exploration of Quantum Computing Use Cases     |
| Quantum Basics<br>(Quantum Communication<br>and Sensing Module) | 01/02/24, 9 am – 6 pm,<br>on-site (Freimann, Munich) | What is a Qubit?                               |
|   | 02/02/24, 9 am – 1 pm,<br>on-site (Garching, Munich) | Quantum Hardware                               |
| Quantum<br>Communication  | 06/02/24, 5 pm – 7 pm, online                        | Future of Cryptography                         |
|   | 20/02/24, 5 pm – 7 pm, online                        | Quantum Cryptography and Communication         |
|   | 05/03/24, 9 am – 1 pm, online                        | Exploration of Quantum Communication Use Cases |
| Quantum Sensing   | 12/03/24, 5 pm – 7 pm, online                        | Quantum Sensing in Practical Applications      |
|   | 19/03/24, 9 am – 7 pm, online                        | Entanglement-Based Quantum Sensing             |
|   | 09/04/24, 9 am – 1 pm, online                        | Exploration of Quantum Sensing Use Cases       |