We invite you to learn more about the exciting research within the Quantum Alliance and the various support programs for early career researchers and young investigators offered at our partner institutions.

Please check our websites for upcoming events for the scientific community from academia and industry as well as for the broader public.

Quantum Alliance is a consortium of German Clusters of Excellence and centers working in the field of quantum science and technology.

Contact
www.quantum-alliance.de
quantum-alliance@uni-koeln.de

Clusters of Excellence are funded by the German Research Foundation (Deutsche Forschungsgemeinschaft, DFG).
The cluster’s central objective is to understand emergent phenomena of matter and – going one step further - to dynamically create new functionalities. Non-equilibrium emergence – its understanding and control – is the overarching theme of the cluster. Central to its success is the imaging of the dynamics of complex physical and chemical systems in real time, on the atomic scale.

www.ml4q.de | ml4q-office@uni-koeln.de

The mission of QuantumFrontiers is to merge quantum metrology and nanometrology, in order to advance to the next level of unprecedented sensitivity and precision, and to push the bounds of knowledge at the largest and smallest dimensions: from gravitational wave astronomy to the manipulation of light and matter on the quantum level.

www.quantumfrontiers.de | office@quantumfrontiers.uni-hannover.de

The aim of ML4Q is to develop new computing and networking architectures using the principles of quantum mechanics. Computing and networking power beyond anything classically imaginable would make quantum computers powerful tools in key areas such as materials design, pharmaceutics, or artificial intelligence. Quantum communication could be made effectively secure.

www.ml4q.de | ml4q-office@uni-koeln.de

MCQST brings together more than 50 research groups from various disciplines to collaborate on an ambitious research program covering all fields of quantum science and technology (QST). The main goal is to discover and understand the novel and unifying concepts of QST, making them tangible and practical for the development of next generation quantum devices.

www.mcqst.de | info@mcqst.de

The PhoenixD research vision is to implement precision optical systems resource and cost-effectively by using additive manufacturing technology. For this purpose, researchers from various disciplines work together on the simulation, production and application of optical systems.

www.phoenixd.uni-hannover.de | office@phoenixd.uni-hannover.de