



## ALLEGATO AMBITI DI INTERVENTO

1. Development of quantum-state detection or quantum interfacing techniques in atomic or molecular internal degrees of freedom.

The activity should target the realization of quantum-enhanced measurement techniques for the determination of the quantum state in an atomic or molecular sample. The method could combine precise spectroscopic methods or the use of non-classical light sources or refined schemes for the determination of the atomic or molecular population distribution.

Further the activity should demonstrate the possibility to realize a photon-matter quantum interface in the chosen atomic or molecular system.