SHORT REPORT – FUNDING APPLICATION 010 Collaborative visits: University of Barcelona and Innsbruck University

Dr. José I. Latorre from the University of Barcelona visited the Innsbruck group during a week in May 2001.

The scientific discussions were centered on the new ideas to solve efficiently NPcomplete problems. In particular, the 3-SAT problem was analyzed in detail using the techniques from quantum adiabatic evolution. Other techniques as the simulation of euclidean evolution on minskownkian time or generalization of GSAT algorithms were analyzed as well. The visitor also delivered a talk on "Three-party entanglement from orthopositronium".