

# Quantum Information Group

## Sharif University of Technology

**Presenter:** Mostafa Taheri

**Title:** Alberti-Uhlmann Conditions

**Abstract:**

Any dynamical or measurement process on a quantum system is described by a completely positive trace-preserving map or a quantum channel for short. In 1980 Alberti and Uhlmann found a condition for the existence of a quantum channel that simultaneously transforms an input-pair of states into an output-pair. Since then this problem and its generalizations have been extensively investigated from different points of view. Nevertheless, the question of whether or not a quantum channel can transform a pair into another if we allow it to act in different discrete or continuous time steps has not been addressed so far. I will be speaking about this problem and the progress I have made in my research.

**Place:** <https://vc.sharif.edu/ch/sraeisi>

**Date:** Khordad 25 1400

You can add this seminar to your google calendar by this [link](#).