

## On the Stability of Degenerate Schrödinger Equation Under Fractional Feedback

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### Abstract

This work is devoted to study the well-posedness and stability of Schrödinger equation with a fractional boundary control. First, we establish the well-posedness of the degenerate problem  $u_t(x, t) - \imath(a(x)u_x(x, t))_x = 0$ , with  $x \in (0, 1)$ , controlled by Dirichlet-Neumann conditions. Then, exponential and polynomial decreasing of the solution are established using multiplier method.

**Mathematics Subject Classification :** 35B40, 35Q41, 35P15.

**Keywords:** Degenerate Schrödinger equation, exponential stability, semigroup theor.

### References

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