Quantum Aspects of Black Holes

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Bibliography:

- *"Quantum Field Theory in Curved Space"* by Birrell and Davies (1994). Standard reference book.
- *"Aspects of Quantum Field Theory in Curved Space-Time"* by S. A. Fulling (1991). More mathematically-oriented; somewhat peculiarly written.
- *"Introduction to Quantum Effects in Gravity"* by V. F. Mukhanov and S. Winitzki (2007). Very simply written; easiest to read.
- *"Quantum Field Theory in Curved Space-Time and Black Hole Thermodynamics"* by R. M. Wald (1994). Most mathematical and rigorous; it introduces the algebraic approach.
- *"Quantum Field Theory in Curved Space-Time"* by L. E. Parker and D. J. Toms (2009). Rather new, very good book - solid and well-written.
- *"Modeling Black Hole Evaporation"* by A. Fabbri and J. Navarro-Salas (2005). Quite a new book; with many details geared towards black hole evaporation.
- *"General Relativity"* by R. M. Wald (1984). Very mathematical and rigorous; only chapter 14 is really relevant for this mini-course.

The next books are essentially on classical General Relativity, mostly on black holes (with just a little part relevant for quantum black holes):

- *"A Relativist's Toolkit"* by E. Poisson (2004). Relevant for the laws of black hole mechanics.
- *"Black Hole Physics"* by V. P. Frolov and I. D. Novikov (1997). It contains rather specific research results obtained up until 1997.
- *"Introduction to Black Hole Physics"* by V. P. Frolov and A. Zelnikov (2011). Kind of a 2011 update of the book above by Frolov and Novikov, although this one is a little less advanced.
- *"Black Holes. An Introduction"* by D. Raine and E. Thomas (2010). An easy read.