

# **Applied Physics 150b, Quantum Measurement and Control: Homework #5**

(Dated: February 9, 2017)

**Due:** Thursday, February 16, anytime before midnight. There will be an “INBOX” outside my office in Watson (Rm. 266/264).

1. **Reading: Section 2.4-2.6 of Ch. 2, Wiseman; Braunstein and Caves paper on quantum statistical distance [1].**
2. **(10 points) Exercise 2.7, Wiseman**
3. **(10 points) Exercise 2.8, Wiseman**
4. **(10 points) Exercise 2.9, Wiseman**
5. **(10 points) Exercise 2.10, Wiseman**
6. **(10 points) Exercise 2.11, Wiseman**
7. **(10 points) Exercise 2.13, Wiseman**

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[1] S. L. Braunstein and C. M. Caves, Phys. Rev. Lett. **72**, 3439 (1994).