TCS-UY.3104 Advanced Seminar: Entropy

Assignment #5

- 1. In quantum mechanics, what is the difference between a mixed density operator state and a pure density operator state?
- 2. What is an "ignorance" interpretation of a mixed density operator state? What is one problem with such an interpretation?
- 3. What makes the correlations exhibited by the subsystems of a composite system in an entangled vector state different from correlations exhibited by classical systems?