

PHY2010 HW 7 - Answers

1. To what must the decay variations in Everest Figure 11-8 be attributed?

Answer: The random nature of the noise signal.

2. What assumptions are implied when we speak of a "reverberation time"?

Answer: High modal density, which implies uniform distribution of sound energy and random direction of propagation.

3. What is an "electroacoustically coupled" space?

Answer: This occurs when a sound recorded in one space is played back in a different (or the same) space.

4. What does Everest recommend for the reverb time of a recording studio, as compared to the living room where the music is likely to be enjoyed?

Answer: The reverb time of the studio should be shorter but "not too far" from that of the living room.

5. In artificial reverberation devices,...

a. what is the single ingredient of every form of reverberation device?

Answer: Delay

b. the introduction of what feature adds to the "lifelike" character?

Answer: An initial time-delay gap