

If you pursue a sound wave at 99% of the speed of sound wrt to the air you will see:

1. The sound wave moving away from you at the speed of sound.
- ⇒ 2. A sound wave moving away from you at about 1% of the speed of sound. *100%*
3. A stationary sound wave.
4. You can not pursue a sound wave at 99% of the speed of sound.

If you pursue a beam of light at 99% of the speed of light you will see:

- ⇒ 1. The beam of light moving away from you at the speed of light. *100%*
2. A beam of light moving away from you at about 1% of the speed of light.
3. A stationary light wave.
4. You can not pursue a beam of light at 99% of the speed of light.

If you pursue a sound wave at 99% of the speed of sound wrt to the air you will see:

1. The sound wave moving away from you at the speed of sound.
2. A sound wave moving away from you at about 1% of the speed of sound.
3. A stationary sound wave.
4. You can not pursue a sound wave at 99% of the speed of sound.

*speed of sound = 1200 km/hr
1% = 12 km/hr
actually, 12.060 000 000 015 km/hr*

Mort & Velma look at a sound wave

Mort is stationary relative to the air. A sound wave moves straight up at 1200 km/hr relative to the air. Velma is moving to the right at a non-relativistic speed relative to the air. Is the speed of the sound wave for Velma:

1. Less than 1200 km/hr *few*
2. 1200 km/hr *few*
- ③ Greater than 1200 km/hr *most*