

### **Answer on Question #43774 – Physics – Other**

can the velocity of a particle vary even if its speed is constant? give example

#### **Solution:**

Of course, since velocity is a vector quantity and speed is a scalar quantity, velocity has something speed does not: direction. Thus, an object can travel at the same speed by has a changing direction of movement, and therefore a changing velocity.

For instance, a ball on a string moving in a circle at the same speed is constantly changing its velocity, which results in its path of motion.