Problem of the Week-1: Walking Around the Earth

Imagine that there is a rope around the equator of the earth. Add a 20 meter segment of rope to it. The new rope is held in a circular shape centered about the earth. Then which of the following can walk beneath the rope without touching it:

- 1. an amoeba
- 2. an ant
- 3. a student (like yourself)
- 4. all of the above

As always, explain and justify your answer.

Posting Date 1/12/09. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 1/23/09.