Captain's Fight 3

FPT 2019
February 8-9th

6th French Physicists' Tournament

Société Française de Physique
COMMISSION JEUNES
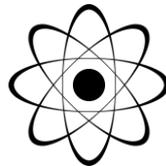
1) Question

2) Solution

You have 2 minutes to solve the following question :

What time, in second, would a typical snail* take to cover France with its slime ?

*Typical snail : Helix pomatia aka « escargot de Bourgogne »

1) Question

2) **Solution**

- France surface, $\sigma_F = 643\,801$ km²

- Snail width, $l_s \simeq 2.0$ cm

- Snail speed, $v_s \simeq 1.3$ cm.s^{-1}

$$T = \frac{\sigma_F}{v_s l_s} = \frac{643\,801 \times 10^6}{2.0 \times 1.3 \times 10^{-4}} = \boxed{2.5 \times 10^{15} \text{ s}}$$