



7th French Physicists'
Tournament



Société Française
de Physique

COMMISSION JEUNES

Captain's Fight 2

FPT 2020
February 7–8th

1. Question



2. Solution

You have 2 minutes to solve
the following question :



How long would it take to go to the
nearest exoplanet* by TGV, in seconds ?

*Proxima Centauri b

1. Question



2. Solution

Data and sources

 Distance Earth-Proxima: 4.243 ly

 1 ly = 9.461×10^{12} km

 TGV average speed: 320 km/h = 0.089 km/s

$$t = \frac{d}{v} = \frac{4.243 \times 9.461 \times 10^{12}}{0.089} = 4.51 \times 10^{14} = 10^{14.65} \text{ s}$$