

FISICA – CLASSE VA
DOMANDE IN PREPARAZIONE ALLA SIMULAZIONE DI TERZA PROVA
A.A. 2014/2015

Special relativity

1. Describe Einstein's postulates to resolve the contradiction concerning the speed of light in classical mechanics and electromagnetics.
2. Explain how it is possible to prove the phenomenon known as "time dilation".
3. What do the terms "proper time" and "time dilation" mean?
4. What does the term "proper length" mean?
5. Describe the twin paradox. Why is it a paradox?
6. In which sense the study of muons is an experimental test of relativistic time dilation?