TOPICS FOR EXAM A

Understand the Michelson-Morley Experiment

Know and understand the Postulates of Special Relativity

Understand Length Contraction and Time Dilation

Understand the addition of velocity in the direction of motion of the moving frame

Understand the addition of velocity in the direction perpendicular to the direction of motion of the moving frame

Understand the relationship between Total Energy ($E$), Kinetic Energy ($K$) and Mass Energy ($E_0$).

Understand simultaneous events or the lack of simultaneity.

Know and understand the Mach Principle and the basic concepts of the Theory of General Relativity