



Figure 1: The spacetime diagram of the two coordinate systems tx and $t'x'$. Included are the time dilation both of static clock in $t'x'$ in terms of tx and of static clock in tx in terms of $t'x'$. Also the Fitzgerald length contraction showing the definition of length as the cross section of the spacetime body by the simultaneity surfaces (of $t = 0$ and of $t' = 0$).