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Leptonic Structure Functions of Photons KLAUS DEHMELT, Florida Institute of Technology, LASZLO BAKSAY, Florida Institute of Technology, MARCUS HOHLMANN, Florida Institute of Technology — Single-tagged reactions $e^+e^- \to e^+e^-\mu^+\mu^-$ are studied with the L3 detector at the Large Electron Positron collider (LEP). The leptonic structure function F_2^γ and azimuthal correlations of the produced lepton pairs can be extracted from the cross-section measurements. Furthermore, the reaction can be used to obtain two more structure functions, $F_A^\gamma,\ F_B^\gamma$, which are related to different helicity states of the colliding photons. This allows measuring the structure functions for transversely and longitudinally polarized virtual photons. The formalism and procedures for the measurements will be presented.

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