**Electron Beam Characterization by Undulator Radiation**, A. ANDERSSON, M. BAESSLER, S. BUTORIN, M. ERIKSSON, R. FEIFEL, S. WERIN, MAX-LAB, Lund - The electron beam in the storage ring MAX II has been analyzed by deconvolution of recorded undulator spectra. The change in coupling between different optics have been proven. The energy spread in various operation modes have been deduced.