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Deuteron structure studies from electron scattering from vector and tensor polarized deuterium with BLAST[1] MICHAEL KOHL, M.I.T., BLAST COLLABORATION — The electromagnetic structure of the deuteron is manifest in many polarization observables accessible by electron scattering in elastic, quasielastic, and pion production kinematics which have been measured simultaneously with the BLAST experiment at MIT-Bates. The deuteron's quadrupole moment and associated nonspherical shape give rise to elastic tensor analyzing powers and vector correlation parameters. Electrodisintegration in the quasielastic regime allows for a systematic study of final state interaction, meson exchange and relativistic effects. Pion electroproduction from tensor-polarized deuterium is well suited to probe effects due to the two-nucleon singlet-S state. This talk will discuss the current status of the data analysis and present preliminary results.

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