Abstract Submitted
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**Coherent coupling of magneto-excitons probed by two-dimensional Fourier transform spectroscopy**[1] JAGANNATH PAUL, CUNMING LIU, University of South Florida, STEPHEN MCGILL, National High Magnetic Field Lab, Florida state University, DAVID HILTON, University of Alabama at Birmingham, DENIS KARAISKAJ, University of South Florida — We present the coherent two dimensional Fourier Transform (2DFT) spectra of magneto-excitons in undoped GaAs quantum wells at high magnetic field up to 10 Tesla. The 2DFT data reveal strong coherent coupling between resonances and line shapes which are strikingly different from the zero field spectra. 2DFT spectra measured using co-linear and co-circular polarizations at low temperatures will be discussed.

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