Abstract Submitted for the TSS13 Meeting of The American Physical Society

Learning new skills with undergraduate research GREGORY BEUHLER, NIKOLETA THEODOROPOULOU, Texas State University-San Marcos — Undergraduate research can provide an opportunity to learn new skills as well as gain valuable work experience prior to graduation. This semester I am assisting a graduate student at Texas State University-San Marcos with testing for a two-dimensional electron gas between layers of strontium titanate oxide (STO) and bismuth ferric oxide (BFO). So far I am being trained in thin film deposition techniques, such as DC and RF sputtering, and transport measurements using a physical property measurement system. I have also been trained in the use of a state-of-the-art dual beam scanning electron microscope (Helios 400) to perform electron beam lithography, ion-beam milling, and gas injection deposition. I have thoroughly enjoyed my time in the lab so far and hope to encourage other students to get hands-on physics experience and continue learning.

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