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**Low-temperature transport in highly disordered films of superconducting magnesium diboride** NICHOLAS BREZNAY, AHARON KAPITULNIK, Stanford University — Many features make magnesium diboride an interesting model system for understanding the behavior of two dimensional BCS superconductors, including its sensitivity to disorder and low spin-orbit coupling. We study the transport behavior of highly disordered magnesium diboride films, and will review preliminary low-temperature magnetoresistance measurements in the regime of high magnetic fields. We connect these results to recent work on multilayered films prepared using a similar process and also to similar work on other model systems, and review prospects for future study.

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